VOL. VII.

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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1920

Term No. [redacted] 264

CHARLES D. NEWTON, AS ATTORNEY-GENERAL OF THE STATE OF NEW YORK, EDWARD SWANN, AS DISTRICT ATTORNEY OF THE COUNTY OF NEW YORK, AND LEWIS NIXON, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK, FIRST DISTRICT, APPELLANTS,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK, RESPONDENT.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED MARCH 31, 1921.

(File No. [redacted])

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CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 14917

New York, October 21, 1919.

Before ABRAHAM S. GILBERT, Special Master.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 14918
MR. O'BRIEN, of Counsel for defendant Swann.

GEORGE E. WOODS resumed the stand.

Mr. Hayward: Before we proceed I would like to tell the Master we have not received the books that we asked for several times before, and which were promised to the Master and to counsel at the hearing at the Gas Company's office.

The Master: Those are the books of the old company? 14919

Mr. Hayward: Original cost records of the old companies.

The Master: Step down, Mr. Woods. Mr. Carter, take the stand.

Mr. Hayward: Our experts tell me they have been unable to get what they call the pay rolls also for the general office, which have been promised since the 23rd of September, and which we are anxious to have.

14920 George E. Woods, Cross.

Also a new wrinkle has developed up there. Dr. Weber tells me, confirmed by Major Clark, that Mr. Goetz and Mr. Ransom decline to allow counsel or experts to see the monthly reports of operations or any other record, unless it is agreed that anything looked at by counsel or experts may be admitted in evidence in this case.

Mr. Ransom: May I clear up this matter of what they have just referred to first? There has been no such attitude, and never an intimation of any such attitude on the part of either Mr.
14921 Goetz or myself, with respect to any reports of operations whatever, or with respect to any data that is underlying any of the books or any of the tabulations which are in evidence. What Mr. Hayward would have referred to if he had understood the situation was this: There are made up by one of the statistical employees in the accounting department of the company some studies for the use of executive officers. They are not reports of operations, they are not reports in any real sense to anybody whatsoever. They are merely analyses from this, that and the other viewpoint, which are submitted to and are used
14922 by executive officers in their observations and comments upon the work of the company. Now, nothing runs from those reports or those analyses into the books. They are not reports, they are not made up by any of the operation men; they are merely statistical studies from the books; they are after the books, and not before the books. As to those we took the position, which I think was a reasonable position, on Saturday we permitted Major Clark to examine this book at great length, and Mr. Frank, who has been there with a large staff for many months, on behalf of the Commis-

sion, Mr. Frank and Major Clark examined this book in great detail, so that they could see that that was the case, that it was not anything in the way of data underlying the books. They examined it, and then we took the position which I think is a reasonable position, that if these defendants wish to have the complete use of studies which have been made by statisticians in that department, or statisticians of Mr. Teele's staff or by Mr. Goetz or myself, or anybody who undertakes to make from one point of view or another, an analysis or study of this company's rec- 14924
ords, that they should have that right on condition that if they examine it, and it is used by them, it go in evidence.

The Master: Now, the first question is, is there any question as to what this book is, in the line of Judge Ransom's statement.

Mr. Hayward: Mr. Clark tells me it is labeled across the front of it "Monthly Reports."

Mr. Ransom: I will show you what it is.

The Master: Is this the book?

Mr. Ransom: This is the book. It is studies that are made, analyses of monthly reports made up by some one in the accounting department. 14925
For example, here we have the month—so far there is July 31st. Now, we have the analyses of comparative results. You see here is comparison of 1919 with 1918. They are penciled analyses that are made up by statisticians in the accounting department for the use of executive officers.

The Master: You have told me what it is; let me look at it.

Mr. Ransom: It is a corporate record, and not merely a gas record. It relates both to operating and non-operating data.

The Master: Let me tell you my view; I think you are perhaps technically correct in your claim that it is not one of the books of record of the company, and is merely a statistical record —

Mr. Ransom: An analysis from different points of view.

The Master: No, it is not simply an analysis from different points of view.

Mr. Ransom: If your Honor will examine it further, you will see that it is an analysis from various points of view.

14927 Mr. O'Brien: Your Honor will recall that there was reference made to the books of the company, without confining it to the books of account that are in evidence.

The Master: I think it is a form of tabulation—

Mr. Ransom: From the books.

The Master: It is a form of tabulation. I think perhaps technically you are correct in your statement.

Mr. Ransom: I am absolutely correct.

The Master: That that is not a book of account, or any matter that could not be tabulated

14928 by themselves from these books. Apparently it is comparative results, one month of one year with one month of another year. I am not going to make any ruling directing you to permit counsel to examine it, but I do not for the life of me see how it would make any difference. I think, perhaps, in the long run it will rather help you than hurt you, and more as a suggestion, than anything else, I think I would let them look at it to their hearts' content, without conditions.

Mr. Ransom: They have looked at it. Here is the difficulty. Here are analyses that have been

made up at various times by various persons from various points of view. We have also had an analysis is here made by Mr. Teele; we have had an analysis made by Mr. Woods. The obvious purpose of the examination of this record at this time is to come in here and say, "Why some unidentified person with this company last July made an analysis, made it up on this basis which is different from Teele's, made it on a basis different from that of Mr. Woods, or different from that made by some other person.

The Master: You might just as well have it: I 14930
am going to get it sooner or later, and we might just as well have it.

Mr. Hayward: How does Judge Ransom know what the purpose of our experts is?

The Master: It doesn't make any difference. If we have one tabulation from Teele from one angle, and another tabulation from Woods from another angle, and another tabulation from some unidentified man from another angle, I think it is a good thing to have them go in.

Mr. Ransom: I would like to have this book in evidence.

The Master: But you cannot make it as a con- 14931
dition.

Mr. Ransom: I think I have a right to make it as a condition.

The Master: The answer to it is this, Judge Ransom: If you let these gentlemen look at this book, if they make any use of it at all on cross-examination of a witness, they are putting it in evidence.

Mr. Ransom: What they stated was that they desired to use it not in order to bring out the matter here on the witness stand, but to make up tabulations for the defendants' case.

14932 George E. Woods, Cross.

Mr. Hayward: That was not stated.

The Master: All I am going to do about it is to say that I will not direct, in view of the fact that this is not one of the books of account of the company, that it be submitted for inspection of counsel for the defendants.

Mr. Ransom: Further inspection.

The Master: But if I were counsel for the complainant I would permit it to be done.

Mr. O'Brien: I call your Honor's attention to this point—

14933 Mr. Hayward: Major Clark tells me that Mr. Webber did not make any such statement as to what they wanted to use this for. Personally I do not know what he wants to use it for, as I told the Master. He thinks Major Clark thinks it will expedite their evidence in getting at the true facts and conditions if they see it. That is all I know about it. We have not declared we were going to use it for any purpose.

The Master: You say you would like to have it in evidence?

Mr. Ransom: I would.

The Master: Then I direct that you let the

14934 other side see it and I will direct its going in evidence later on.

Mr. Ransom: I shall except to your Honor's ruling.

The Master: Let him see anything that is not a personal matter between the executives.

Mr. Ransom: You do not think that the defendants would have a right to examine the elaborate statistical analyses made by Mr. Teele except as made here? They would have no right to examine the number of studies Mr. Goetz and I have made?

The Master: Do not let us continue the discussion. My view is this, that the minute you say that would like to have that book in evidence or anything in there—

Mr. Ransom: If it can all go in.

The Master: All right, let him see it, let him look at it, let him study the thing from every possible angle. My mind runs to this point. You come in this court and say it costs us 83 cents to make and distribute gas.

Mr. Ransom: More than that.

The Master: More than that. Give them every 14936
opportunity in the world to satisfy themselves that you are right. If they have had every opportunity, and if they have had every chance to check up every kind of record you have got, and I reach a conclusion that you are right about it, then you are right beyond any question, and the minute the record shows you are withholding a single paper it hurts your case. That is my judgment.

Mr. Ransom: This trial has now been going on for a long time.

The Master: I know how long it has been going.

14937

Mr. Ransom: But there is an effort now on the part of the defendant to precipitate and bring about anew the things which they found for at the beginning.

The Master: What is that?

Mr. Ransom: Namely, the promiscuous production in this court of great quantities of vouchers and great quantities of records.

The Master: They will not do it. Leave that part of it to me.

Mr. Hayward: What has that got to do with

this report? The purpose of it is to prevent just what you are complaining about now.

The Master: Let them see it.

Mr. Ransom: I except to your Honor's ruling.

The Master: How about these pay rolls that Mr. Hayward refers to?

Mr. Ransom: The situation on that is that you directed the other day that if Dr. Weber was to go to Mr. Carter and ask for the general offices' pay roll it would be given to him.

The Master: Why should he go to a particular

14939 person?

Mr. Ransom: Because he is the secretary and an officer of the company.

The Master: How many books are there?

Mr. Ransom: They are not books they are sheets.

The Master: How long do you want them? Why has not the man gone to Mr. Carter and asked for them? I will swear Mr. Carter because I want to ask him about something else.

14940 Robert A. Carter, called as a witness for the complainant, being duly sworn, testified as follows:

By the Master:

Q. Mr. Carter, you have heard this discussion about these pay roll sheets?

A. I have; yes, sir.

Q. What particular man has charge of that file in your office?

A. The pay rolls are in the cashier's department.

Q. Why can you not give an order to the cashier or somebody in charge there to submit those pay roll sheets to counsel for the defendants without their seeing you personally?

A. I can do that.

Q. Will you do that?

A. I will do that; yes, sir.

Mr. Ransom: The direction your Honor gave the other day was otherwise, though.

The Master: You probably hold me to some technical language I used.

Mr. Ransom: I wish your Honor could vizualize the situation we have got up there at this company's office.

Mr. O'Brien: I want to have something to say on this. 14942

The Master: Sit down until Judge Ransom is through.

Mr. Ransom: These defendants have a great swarm of men up there. They have two rooms jammed full of this company's books and records and accounts brought in from the works, brought in from the departments, and the whole thing they throw around helter-skelter. The accounting system of this company has just been thrown topsy-turvy.

The Master: Do the best you can.

Mr. Ransom: We are doing the best we can, but if you would see the sort of thing that exists 14943 up there day by day with this great swarm of men from the Commission and from the Attorney General's office and Mr. Maltbie's department, and now they are coming in today from Mr. O'Brien's department, that the great mass of books is piled up there in the corner of the room, with vouchers by the thousands—

The Master: That is a penalty in this case and you have to do the best thing you can.

Mr. Hayward: There is a total of six men up there, which Mr. Ransom calls a swarm.

The Master: I can understand how these people who go up there are paying no attention to your method of handling the accounts and are throwing them aside.

The Witness: Your Honor, may I ask whether you will direct that the inspection of this pay roll, which is a short one and which can be concluded in ten minutes of any man's time, will be made in the cashier's department?

The Master: Yes, I will direct that the inspection of those pay roll sheets be made in the
14945 cashier's department and not taken out of the room. If I hear any more complaints about the throwing around of records, I shall direct that the examination be made in the place where the records are in the various rooms.

Mr O'Brien: That is what I suggest, your Honor, that they not be brought in piecemeal into the upper chamber, but the inspection made where they are.

The Master: I am not going to let you men go up there and open drawers and boxes and that sort of thing.

Mr. Hayward: The statement Judge Ransom
14946 made as to things being thrown around up there every day is absolutely without the slightest foundation and utterly false.

Mr. Ransom: I was there last night.

Q. Mr. Carter, what I want to know is this: There were books of the constituent companies when they were organized into the Consolidated Gas Company, were there not?

A. I am so informed, your Honor.

Q. Didn't you ever see them?

A. I have never seen them.

Q. Who is there in your company who knows about

those books; who has charge of them when the consolidation took place?

A. I do not think anyone had charge of them. I think they were simply in some store room of the old Irving Place Building.

Q. Who has charge of those? Who in the company has the responsibility officially?

A. I have charge of them.

Q. What have you personally done with reference to trying to locate those books?

A. I have personally searched the vault in which our accounting or general office accounting records are 14948
kept, and have found nothing but some minute books and some journals, three or four journals of those old companies. The ledgers I have been unable to find. They were not in the vaults of that department. I gave instructions that wherever old records of the other departments in that building—the engineering department, the street department, the meter department and the commercial department—are located should be searched thoroughly for those ledgers. In 1884 at the time of the consolidation records of proceedings before a legislative committee at that time indicate that a Mr. Yalden, who was accountant of that committee or for the minority of the committee, 14949
had the books of all six companies. There was evidence of that. Whether he had them all there or went to their separate offices, which are still maintained, or not, I do not know. But in any event the results of his examination of those books were very completely spread in the record of that Senate investigation.

Q. Were not the books used in the original 80-cent gas case?

A. At that time there were but four of them used. I would like to correct what I said. There were only

14950 Robert A. Carter, Direct.

five of the six companies' books in evidence before Yalden. Yalden had not the books of the Knickerbocker Company. I know from my familiarity with Marwick & Mitchell's report, they being the accountants being engaged in the defendants, the city, in the previous 80-cent case, that they had before them the books of four of the companies out of the six. At that time they had not the Metropolitan Company's books. I do not know that the Metropolitan or the Knickerbocker books were ever in the general office at all.

Q. In the trial of the original 80-cent gas case were
14951 not these books, or some of them in existence?

A. Some of them were.

Q. Which books; do you recall?

A. I gather from Marwick & Mitchell's report that they had the ledgers of four of the companies.

Q. Were you in charge of those books at that period?

A. Yes, I was nominally in charge, your Honor, but I want to correct the statement that was made by Colonel Hayward. He made a statement respecting my testimony in the eighty-cent gas case, respecting those books, that had no basis of fact whatever.

The Master: I do not remember the statement.

14952 Mr. Hayward: The statement was, as I remember it, that it was Mr. Carter who said those books were kept under lock and key.

The Witness: Carefully preserved and considered of great value.

The Master: Yes, I remember that.

The Witness: None of which I ever considered, your Honor, because they were not the basis of the consolidation. From the analysis that was made of those books by Yalden and Marwick and Mitchell, and my own study of Yalden's examination of them, convinced me they were

14953

valueless for any purpose. I never attached any importance to them whatever, and far from having preserved them carefully up to the time they were examined by Marwick & Mitchell, in 1906 I had never seen them. They were there in the basement of the building at Irving Place. As I say, I have searched myself, and the search is still going on. It may have been successful; I don't know.

Mr. O'Brien: I would like at this point, on the question of what books there were, at the time you have asked the witness about, in existence 14954
in 1906, I would like to call Mr. Edgerton on the stand, and enlighten you upon the details of these books.

The Master: No.

Mr. O'Brien: He was over them all, and he will give you a definite statement. He says they were all except the Knickerbocker Company, in existence.

The Master: My only purpose in calling Mr. Carter to the stand was to have Mr. Carter under oath say he hasn't got them and doesn't know where they are, and cannot produce them. If you want to cross-examine Mr. Carter, I will per- 14955
mit it.

Mr. O'Brien: It is a collateral matter, your Honor, and it may develop into an important matter in the case.

The Master: Well, I am assuming—

Mr. O'Brien: It goes to a very important question, the question of— It may concern a question of going value, and it does concern actually the matter of original cost, and the non-existence of these books, the efforts taken to protect them, the indifference, if there was any, with regard to

protecting them, and all that, may become a very vital matter, and so that that may be cleared up now, I would like to call Mr. Edgerton to the stand. He was a witness in the original gas case, he made an appraisal of the company in the original case, and went over these books of original cost, and he will be able to tell you in a couple of minutes just what those books were.

The Master: I am assuming there were books, I am not interested just now as to what those books were. I am trying to locate books. Mr.
14957 Carter testifies that he has personally gone into the vault and looked around, and still has men looking, and he does not know where they are. As I understand, there is no other official that I can call here to find out any more about it than from you; is that correct?

The Witness: Yes, sir.

Mr. O'Brien: Well, I may cross-examine the witness?

Mr. Hayward: I would like to cross-examine on this book question, three or four questions.

The Master: Has Mr. Chambers any questions to ask?

14958 Mr .Chambers: I will give way to Colonel Hayward and Mr. O'Brien.

The Master: Then you waive your right to cross-examine on this?

Mr. Chambers: I do not want to waive that right.

The Master: Well, if you have anything, then you ask it now.

Mr. Chambers: On this question I will waive in favor of Mr. O'Brien and Colonel Hayward.

The Master: Then I will allow a reasonable examination within very close limits.

Mr. O'Brien: Well, I can't see, your Honor, why, every time I begin to ask a witness questions, you precede it by saying—

The Master: Because I think you waste a lot of time with a lot of questions that are not important. You have drawn that answer from me, and I have given it.

Mr. O'Brien: I am an attorney in the case, and I have to make my own record in my own way. I don't let the Court or the other side make my record for me in any case I am in.

The Master: Go ahead, Mr. O'Brien. 14960

Mr. O'Brien: As I said, your Honor, this matter goes—it is a very important matter. I have the same situation come up in the Kings County case, involving millions of dollars.

The Master: I would like to locate these books. I would like to find them. I would like to get them here, and I would like to have you, if you can, by any questions you ask Mr. Carter, show that Mr. Carter knows where they are.

Mr. O'Brien: I don't want to take up a lot of time, your Honor; I want to expedite it, but I don't want—

The Master: What I don't want you to do is 14961
to waste a lot of time as to what books there were and an enumeration of them and what they were and what man wrote them. Let's assume there were books.

Cross-examination by Mr. O'Brien:

Q. Mr. Carter, did you understand the Master's questions to apply to the books of the companies that went into the Consolidated Gas Combination?

A. I did.

Q. And the books you had in mind when he asked the question were books of account, weren't they, or did they extend to other classes of books?

A. Books of account.

Q. Just books of account, ledgers, journals, cash books?

A. Ledgers particularly.

Q. Did it involve any vouchers?

A. I did not understand that it did.

Q. Any time books, or any books supporting general books of account?

A. I did not understand so.

Q. Now, these books—

The Master: I did not so indicate it and did
14963 not so intend it, Mr. O'Brien, because it would not be in the realm of possibilities that vouchers and receipts would be kept for this period.

Q. Then these books did figure in the gas case of 1906?

A. In the proceedings of 1906?

Q. Yes.

A. Yes.

Q. And they were referred to in cross-examination?

A. By whom, and through what witness?

Q. By any witnesses.

A. Well, I do not carry that 1906 case in my head. I do not know who was examined about those books.

14964 Q. Is it not a fact that different witnesses in that case who had examined the books and records of the Consolidated Company and its constituent companies, examined into these books and made schedules from them?

A. I know that Marwick & Mitchell did. I do not recall at the moment other witnesses.

Q. And Marwick & Mitchell were—

The Master: Are you through with the answer?

The Witness: Yes, sir, I am through, your Honor. I do not recall other witnesses having testified in respect to those books.

14965

The Master: Unconsciously, Mr. O'Brien, you always interrupt an answer.

Mr. O'Brien: Well, he hasn't anything further to say on that question.

The Master: No, but you start to break in on him all the time; you are so anxious to get the next question out that you don't let a witness finish.

Q. Mr. Carter, then Marwick & Mitchell were statisticians or accountants who appeared for the City of New York in that litigation?

14966

A. That was the firm of expert accountants that were engaged by the corporation counsel.

Q. And they prepared schedules that were put in evidence in that case?

A. They prepared a report, quite an extensive report, which was put in evidence, yes, sir.

The Master: Let me ask you, Mr. O'Brien, in view of the testimony of Mr. Carter that these books are lost, haven't you made a very firm foundation for the use of copies of them made by Marwick & Mitchell? Do you need the original books in Court if you have full extracts from them?

14967

Mr. O'Brien: Well, I can't say at this time, your Honor, just how deeply they went into them, and I could not give you an adequate answer.

The Master: We will probably find, when we are all through with it, that Marwick & Mitchell have extracted from all of these books, everything that you want; and in view of Mr. Carter's testimony that the books are lost, I will let you use those copies with the safe force and effect as the originals.

Mr. O'Brien: While the witness is on, I think

I ought to cover two or three points I have in mind.

The Master: Am I not right about that, Mr. Hayward?

Mr. Hayward: Well, I don't know what excerpts Marwick & Mitchell made from them, or whether it covers everything we want in this case.

The Master: Isn't that a fair assumption, that they went pretty fairly into it?

Mr. Hayward: I don't know.

The Master: Off the record.

14969 (Here ensued discussion off the record.)

Mr. O'Brien: So that your Honor will understand me, I want to say that what was done in the original case is not an outline of what we intend to do here and the way we want to conduct this case. Now, the question of the existence or non-existence of the book that show the financial story of the companies that entered into the combination called the Consolidated Gas Company, is of supreme importance here.

The Master: I have got your point. Will you ask the question? I know what you want. See if you can find the books.

14970 Q. Where were the offices of the company during 1906, during the pendency of the former litigation?

A. At No. 4 Irving Place.

Q. And at that time did you hold the same position you hold today secretary and vice-president?

A. I was secretary I am sure. I am not sure that I was vice-president at that time.

Q. And was it your function then to take charge of and have control of the books of account of the several companies that entered into the combination, and the books also of the Consolidated Gas Company itself?

14971

A. My duties as secretary had nothing to do with any books of any predecessor company.

Q. Well, who might be said to have been at that time, Mr. Carter, the custodian of records of the company?

A. Of the Consolidated Company?

Q. Yes.

A. Myself.

Q. And did you have charge of those matters and supervise their use at the time of the investigations made by the several accountants, statisticians and experts in the original case?

14972

A. Supervise the use of what matters?

Q. Books of record, books of account, both of the Consolidated Gas Company and the constituent companies?

A. Are you referring to Marwick & Mitchell's investigation at our office of the accounts?

Q. Did you have charge of all the records of the Company?

A. Yes, all of the companies' records were in my charge as secretary.

Q. And you distributed them for examination when they came there to see them?

A. No; I was attending the trial. I was not distributing books among Marwick & Mitchell's accountants at that time.

14973

Q. I mean did you supervise or did you give directions, did you determine whether they were to be used or not?

A. No, I did not determine anything. The Court determined that Marwick & Mitchell were to have access to the Consolidated Gas Company's books of account and records; also to such of the books of the predecessor companies as could be found. I think that the books of four companies were found at that time, and they had access to them.

Q. Did you have a vault in No. 4 Irving Place?

A. We had at least one, and I don't know but more. I don't do much vault work myself personally.

Q. Well, you had charge of the—

A. Charge, yes—I didn't spend much time in vaults.

Q. The men that were under you took directions, didn't they?

A. They did.

Q. As to whether a book would be taken out and put back in the vaults?

A. Generally speaking I was in charge of the ac-
14975 counts and records of the Consolidated Gas Company.

Q. Wasn't there a claim made in the original case for going value, Mr. Carter?

A. You are referring now to the prior 80 cent gas case?

Q. Yes.

Mr. Ransom: I object to the question.

The Master: I think I will sustain the objection.

Mr. Ransom: There was no such thing known to the law as going value then; it was called something very different.

14976 The Master: I will sustain the objection.

Mr. O'Brien: I want to call the witness's attention to these matters just to show you that the witness knew the importance of the preservation of these books.

Mr. Ransom: We cannot go back of the Roland appraisal of November 11, 1884.

The Master: I will let you ask the witness whether he did not know that there was some question involved as to the value of the Consolidated plant.

Q. Mr. Carter, were you not aware of the fact

that the books of the constituent companies that we have referred to this morning in your testimony, were of vital importance in connection with rate litigation of the Consolidated Gas Company?

A. I never considered them of any importance whatever.

Q. Did you seek anybody's advice on that subject?

A. I did not.

Q. You just used your own?

A. Used my own, or formed my own opinion?

Q. Formed your own? 14978

A. I formed my own.

Q. And followed your own?

A. I don't know what you mean.

Q. You say that you assumed that they were of no importance at all, of no value at all?

A. I said that in my opinion they were of no importance.

Q. Did you seek any legal advice on that subject?

A. I did not.

Q. Did you ever discuss it with any lawyers of the company?

A. I did not. 14979

Q. Did you ever discuss it with any officers of the company?

A. No, sir.

Q. Was anything ever said about the protecting of these books in connection with questions of law and of fact that would arise in any other rate case?

A. Never heard of any discussion of the question whatever.

Q. You were aware of the fact that the termination of the other case in the United States Supreme Court it would be very likely that the company would have another rate case, were you not?

Mr. Ransom: I object to the question as immaterial. Under the ruling of the United States Supreme Court these books became no longer of any possible importance.

The Master: I will allow it, as to whether Mr. Carter did not anticipate in view of the privilege accorded by the United States Supreme Court, that sooner or later, if experience showed that they were losing money, there would be another trial. Is that so, Mr. Carter?

A. I formed no opinion whatever on that subject
14981 at that time.

Q. When did you begin to form an opinion on that subject?

Mr. Ransom: I object to that.

Mr. O'Brien: He has sworn to affidavits, your Honor, that they have lost money ever since this was put on the statute books, the law of 1906.

The Master: I will allow the question.

Q. When did you begin to form an opinion—

The Master: When did you begin to feel that you ought to start another suit to protect your company?

The Witness: In 1918, your Honor.

14982 Q. Up to that time there had not been any discussion on the subject?

A. No.

Q. Between you and the officials of the company?

A. No.

Q. There had been no discussion of losses or deficits in the return under the statute of 1906?

The Master: That is a different question.

A. I would not say that the results of the companies' operations had not been the subject of discussion, because that would be nonsense.

Q. It would be nonsense?

A. Yes, to say that the results of the companies' operations had never been the subject of discussion among the officials would be nonsense.

The Master: What Mr. Carter says is that they did not seriously consider another trial until 1918.

Q. At what time in 1918?

The Master: I will not go into that.

Mr. Ransom: I am willing that he should answer. They have made the charge about three years here.

The Master: Go ahead. 14984

A. I would not undertake to fix the date.

Q. About what time?

The Master: Was it early or late in the year 1918?

The Witness: Well, your Honor, I may have had some personal views on the subject without discussing it with anybody early in 1918, but it did not take definite shape until the latter part of the year. In other words, there was always a possibility in my opinion at that time that conditions might take a favorable turn, and that we might be able to struggle along without a rate case, as we had done for a great many years, but 14985
along toward the end of 1918 it began to look as though conditions had reached a more or less permanent status, and the company was not making practically its operating expenses, and we felt that we could not continue in justice to the stockholders of the company to permit that to go on, we could not permit that to go on without bringing proceedings.

Q. Mr. Carter, you were aware of the fact that there was a litigation pending from July, 1916, involving this same 80 cent statute, within the City of New York, were you not?

Mr. Ransom: I object to the question as immaterial. It has no relation to this company.

Mr. O'Brien: It has a serious relation to it. I will bring that out in a minute.

Mr. Ransom: The fact that Mr. O'Brien may have talked over that length of time has no bearing on his talking in this case.

The Master: I will allow the question.

Mr. Ransom: Exception.

The Master: Did you know there was another 80 cent gas case pending since July, 1916?

14987 The Witness: I did, very well. I know of all rate cases that go on in this state.

Q. You know Mr. Brady's connection with the Kings County case?

Mr. Ransom: I object to the question.

The Master: Objection sustained. I am trying to find out what has become of these old books.

Mr. Ransom: Mr. O'Brien doesn't want to find out. He wants to go into other things.

Q. Mr. Brady, one of the directors of your company is a dominant factor in the Kings County Lighting Company case that brought an action in 1916,

14988 is he not?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Carter, did the company have a vault at that time? You say they had some kind of a vault?

Mr. Ransom: What time?

Q. At the time of the pendency of the old action?

The Master: Please don't interrupt.

Mr. Ransom: I object to the question unless the time is fixed.

The Master: That is the proper way to raise a question.

Q. In 1906?

A. Unquestionably.

Q. And presumably these books that we have referred to, and that we desire now to see, were in that vault?

A. I cannot answer that question, I do not know.

Q. Can't you say where books of accounts were kept at that time?

A. The Consolidated Gas Company's books of account?

Q. The books of account of all the companies that made up the Consolidated Gas Company? 14990

A. There was only one company at the time, only the Consolidated Gas Company. There were not all the comapnies at the time, in 1906.

Q. Where were the books kept of constituent companies that you say you cannot find now. Where were they kept in 1906 if you know?

Mr. Ransom: I object to the question.

A. There were no constituent companies in 1906.

Q. Well, you know what I mean?

A. Well, say what you mean.

Mr. Ransom: I want to make an objection if Mr. O'Brien and the witness—

The Master: If Mr. Carter will only wait a 14991 minute before he answers a question, and Mr. O'Brien will wait until I rule upon the objection that is being made, we will probably have some orderly procedure.

Mr. Ransom: I object to the question because there are no books of constituent companies, which have not been produced, and which have not been put fully at the disposal of the defendants. There are no books of constituent companies that are lost.

Mr. O'Brien: I may have used that term inadvisedly.

Q. You understand what I have in mind?

A. I know, I am only looking at the record.

Q. Well, we will not quibble over that.

A. No, sir.

Q. They were in existence at that time?

The Master: Do you mean the Consolidated Companies.

Q. The Consolidated Companies. These books were in existence in 1906?

The Master: Let us refer now to the companies which formed the Consolidated Company,
14993 and which the Consolidated Company superseded, the companies that were consolidated into this gas company. Talk about the books of the consolidated companies.

Mr. Ransom: Predecessor companies.

The Master: All right, call them predecessor companies.

The Witness: Predecessor companies is a better description of them.

Q. Go ahead, Mr. Carter.

The Master: Were the books of the predecessor companies kept in vaults, or in shelves, or in general offices, or where?

14994 The Witness: They were undoubtedly kept in the basement, but whether on shelves, or in a vault, I don't know.

Q. When did you last see them?

A. I have no recollection, Mr. O'Brien, of ever having seen them.

Q. Well, is there some old or superannuated or trusted employee who might know who had charge of those matters?

A. None that I know of. Of course somebody got them up out of the basement and turned them over to Marwick & Mitchell, and when Marwick & Mit-

chell were through with them put them back where they were found.

Q. Do you recall any man who might be nearest, so far as the functions of his position were concerned, to the obligation of taking care of the books at that time?

A. Somebody probably acted under my instructions.

The Master: Mr. O'Brien wants to know if you have in mind any employee?

The Witness: I haven't in mind the individual, your Honor. 14996

Q. And you cannot recall any episode that brought up these books in the days following 1906 that might refresh your memory?

A. I haven't given them a thought even, since that time.

The Master: Well, I think we have had enough on it. Col. Hayward, do you want to ask some questions?

Q. Was there any other officer or employee who might share with you, who might have shared with you in that time when they were last known to have been in existence the obligation and responsibility of taking care of them? 14997

A. My department of course consists of assistants and senior clerks, and that sort of thing, and in the order of seniority responsibility would rest upon them more or less for the records that are under my control and under my charge as secretary of the company, although I do not want to have that construed as imposing upon me any obligations in respect of the books of predecessor companies.

Q. You say you don't want to have that impose upon you any obligations?

14998 Robert A. Carter, Cross.

A. Construed as imposing upon me responsibility respecting predecessor companies, because my office gives me charge and control over the books and records of the Consolidated Gas Company.

Q. Only?

A. Only.

Q. Well, you were present during the trial of the former case?

A. I was.

Q. And you heard the testimony, and heard legal arguments on the various questions that came up?

14999 A. Whenever I was present at the trial I heard whatever transpired.

Q. And you followed the case closely?

A. I did.

Q. And you followed the appeal closely?

A. I did.

Q. And you were in touch with the minutest detail, were you not of the litigation from the beginning to the end?

A. Well, in so far as it related to the accounting end of the business my interest was very keen, naturally.

Q. And you are respected in the company as a

15000 master of detail, are you not, Mr. Carter?

A. Not that I am aware of.

Q. Hasn't that generally been conceded by your confreres?

The Master: Objection sustained. Exception.

Q. Will you state whether or not you gave any directions to the men under you in charge of books, record and accounts of the Consolidated Gas Company and the predecessor companies, to carefully guard these records?

A. You are speaking now of the books of the predecessor companies?

Q. Yes.

A. I don't think I ever gave any instructions about them whatever, in any way, manner or shape.

Q. You felt that you were indifferent about them?

A. I was indifferent about them.

Q. You do not recall any time back in 1906 where you felt that they were valuable?

A. I never felt that they were either valuable or important.

Q. You never thought they were important?

A. I never thought they were.

Q. You do not recall having discussed with Mr. 15002
Sherman the question of the importance of these books?

A. I never talked with Mr. Sherman.

Q. About them?

A. About any subject.

Q. Did you say "talk," in the present tense?

A. I never talked, in the past tense, with Mr. Sherman.

Q. About the litigation?

A. About anything; I never met him.

Q. Well, I confused for the moment Mr. Sherman with Mr. Garver.

A. I think you have probably confused him with 15003
Mr. Sterling.

Q. Mr. Sterling. Yes.

A. I did not follow your question; I was thinking more of the name than of the question.

Q. Well, you have discussed these matters with Mr. Sterling from time to time?

The Master: What matters?

Q. Questions of the former litigation and these books?

A. No, never.

Q. Do you know whether you ever did consult him about these books, or discussed the books with him?

A. I am certain I never did.

Q. Never had any correspondence with him with regard to the question of the importance of records of predecessor companies in that litigation?

A. Never.

Q. Never took it up with him in any way?

A. I say never, I have no recollection of having done so.

Q. You do not recall now?

A. I do not recall having done so.

Q. It is possible you did?

15005 The Master: I won't allow that question. Anything is possible.

Q. You heard Dr. Humphrey's testimony in the former case?

The Master: Objection sustained.

Mr. O'Brien: Your Honor, this will go right to the heart of the question now.

The Master: No, objection sustained.

Mr. O'Brien: I mean now—

The Master: I don't care about Mr. Humphrey's testimony.

Mr. O'Brien: I want to bring home to the witness the knowledge of the importance of some

15006 of these books, knowledge that will throw upon him additional responsibility for these books.

The Master: Let us find the books.

Mr. O'Brien: There is a lot of money hinging on this.

Mr. Ransom: There isn't a cent.

The Master: I don't think so. I think you have it all in Mr. Yawlin's tabulations.

Q. Did any attorney connected with or working for the Consolidated Gas Company, ever advise you that these books were unimportant or valueless?

A. No. I will tell you how I gathered that impres-

sion, Mr. O'Brien; from the fact as the result of all the evidence that was produced regarding the accounts and records of the predecessor companies, the whole evidence was absolutely rejected by the Master in the case. As I say, I had not much of an opinion of these books before, and after that conclusion in that case, my impressions were confirmed. It was not necessary that I should consult with anybody to get the impression after the results in that proceeding.

Q. From the Master's decision?

A. From the Master's decision in that case, that the books were without any importance whatsoever. 15008

Q. Do you think that was a reason that you became indifferent to the books?

A. I was indifferent before.

Q. Even before?

A. Even before.

Q. This confirmed your indifference?

A. They never, as I say, entered into the accounts of the Consolidated Company. The Consolidated Company's entries in its books made no reference whatever to the accounts of any predecessor companies. If they had done so, why, that would have been another thing.

By the Master: 15009

Q. The amount of mains laid in the street were carried over from the old books?

A. Not from the general account books; simply from the statistical records.

Q. From the old books?

A. Not from the books of account. They do not contain any information on mains.

Mr. Ransom: There was a basis on which the consolidation took place, records and inventories, which was recognized by the Legislature.

Mr. O'Brien: That would not be binding in this case.

Mr. Ransom: The Supreme Court has held it.

Mr. O'Brien: The Supreme Court did not hold it.

The Master: Next question, Mr. O'Brien.

By Mr. O'Brien:

Q. Mr. Carter, did you follow rate cases then as well as you say you do now?

Mr. Ransom: I object to the question as immaterial.

The Master: Objection sustained.

15011 Q. You were aware at that time, were you not, of the importance of rate litigation of the original cost of properties that go to make up or went up to make up plants of public utilities?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Q. You were aware that these books contained records that would bear directly upon the question of the original cost of the plants of the predecessor companies?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Did anybody advise you at that time that the

15012 Rowland appraisal made it unimportant to preserve these books?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Cross-examination by Mr. Hayward.

Q. Mr. Carter, we seem to have had a different recollection of what the record showed at the 1906 trial. You were there and I was not. I read the record, which you, perhaps, did not. So, to freshen your recollection, do you recall that in that case there was controversy between counsel for the company and counsel for the other interests, the people, the public,

the consumers, in which the public officials wanted to get at these books and look at them, and the counsel for the company bitterly objected to these books that we have been talking about being examined by counsel for the city or anybody else? Do you recall that, Mr. Carter?

A. I do not recall that there was any bitter objection on the part of counsel. I do not think there was any, as a matter of fact.

Q. And do you recall that in that connection you were put on the witness stand and asked where these books were, and if they were available, and that you, 15014
as a witness under oath, said, "I have no doubt that they are locked up somewhere"—

Mr. Ransom: The record of the former suit is here, and I object to this method. It is not the recognized method of confronting the witness.

The Master: Colonel Hayward has not finished his question yet.

Q. Do you recall that in that connection you were put on the witness stand and asked where these books were and if they were available, and that you as a witness under oath said, "I have no doubt that they are locked up somewhere," or words, to that ef- 15015
fect?

Mr. Ransom: Have you finished?

Mr. Hayward: Yes, I am quite finished.

Mr. Ransom: I now object to the question on the ground it is not a proper method of confronting this witness with the testimony of the former trial, if any. The record of the former trial is in court, in possession of the interrogating counsel. If there is any part of the record which bears out his suggestion, he should call that to the witness's attention.

The Master: I am mindful of the fact that this question is not strictly according to the rule, but I will allow it to save time.

Mr. Ransom: Exception.

The Master: You can answer the question, Mr. Carter.

A. I have no recollection. I may have said that if we had any such books, they would be locked up. We keep our offices under lock and key. Anything that we have is locked up, in the way of current or any other records. What I did not say, however, was that
15017 we considered those records of great importance, and had carefully preserved them. That I am satisfied I never said, because I never believed it.

Q. So that my statement to which you referred this morning, to the effect that you said they were under lock and key, was not entirely unwarranted and uncalled for and untrue, was it, Mr. Carter?

Mr. Ransom: I object to the question. It is incompetent, immaterial, and not the proper form of confronting witness with any portion of this record.

The Master: Objection overruled.

Mr. Ransom: Exception.

15018 The Master: I think there is a fair inference from what the witness has said that you were not entirely in error.

The Witness: It was not my intention to refer to that part of the statement, Mr. Hayward.

The Master: What you had particularly in mind, that you laid any stress upon was the importance of keeping them. That was the thing that was in your mind?

The Witness: Exactly, yes, sir.

Q. Do you have any personal recollection now, Mr.

Carter, of the books coming back to the company from this accountancy firm that has been referred to?

A. They were never taken away, Colonel.

Q. The firm simply looked at them at the company?

A. They had space assigned to them, the same as is assigned to the experts of the Attorney General and the Public Service Commission at the present time. These books were there, and when their work was completed, why the space was cleared, and the books I should assume, put away again, of course.

Q. At that time and during all the time subsequent, 15020
Mr. Carter, you had in mind, had you not, the great public indignation that there had been in this community over the loss of old books, of some of the street railway systems and other things that had been brought out in numerous trials and in newspaper accounts of the destruction of old records of these companies that went into the Metropolitan Street Railway System?

Mr. Ransom: I object to the question. It is immaterial here.

The Master: I will allow it.

Mr. Ransom: It includes a state of facts not in any way proved. 15021

A. I do not know that my attention was ever particularly drawn to any public indignation or agitation on that subject. I have no recollection of it.

Q. You do not remember that?

A. No.

The Master: That is all, Mr. Carter. Wait a minute.

Mr. Hayward: Now, I just have this record for the first time in my hand, and it is substantially what I said it was, and what Mr. Carter this morning for the first time said it was.

The Master: Suppose you read into the record by question of the witness—"I read you from page so and so, and ask you if you recall this question and answer."

Q. I read from page 847 of the record of what is commonly called the first eighty cent gas case, Wilcox, *et al.*, against Consolidated Gas Company, this question put to Mr. Carter: "Q. Have you the books of the constituent company in your possession? A. I could not put my hands on them at once, but I have no doubt they could be found. I have not had oc-
15023 casion to refer to them in a great many years, but I have no doubt they are very securely locked up somewhere, and I could find them if you desire." Do you recall that question and answer now, Mr. Carter?

A. I think I would make that answer, probably.

The Master: Do you recall that now as being read back to you? Do you recall that as your language?

The Witness: I should think probably it was. I do not remember a word of that now, but it sounds very much like it.

Mr. Ransom: There is no reference to the importance of it. He merely said he assumed
15024 they are in existence, and thought he could find them.

The Master: Don't you think I can hear that and understand the language as well as you can?

Mr. Ransom: It is not the same statement as is in the record.

The Master: Colonel Hayward said it was not exactly what he said or what the witness said, and I suggested he read it and get it right.

Q. I hand the witness transcript of record of the former eighty cent gas case, Vol. 6, page 5881, being list of books of accounts of companies merged as Consolidated Gas Company of New York, as at

November 10, 1884, being part of the record of Marwick & Mitchell, the accountants we have been speaking about, and ask him to examine this page in which are listed the books then available, which we have asked for, and ask him if they are same as he now recollects to have been produced then (handing record to witness)?

The Master: It runs over on to page 5882, apparently

Mr. Hayward: Yes, I think it does.

The Master: Just glance at those two pages, 5881 and 5882. 15026

Mr. Hayward: The books marked with a star, Mr. Carter, seem to be missing, and it is so noted.

A. That confirms the statement I made, Colonel, that at this time, out of the six companies—out of the books of six companies, two were missing.

Mr. Ransom: Two companies' books?

The Witness: Two companies' books were missing.

Q. And they are indicated by stars, and what are they?

A. They are the Knickerbocker and Metropolitan companies. 15027

Mr. Ransom: Also some books of other companies?

A. Some books of other companies.

Q. And you have now no knowledge or recollection of where those books are, Mr. Carter?

A. I have not.

Q. Since you were here, did you make a bona fide effort to find them?

A. I did, personally; and a search is now going on.

Q. If you do find them, will you let me know as soon as they are located, please?

A. Certainly.

15028 George E. Woods, Cross.

GEORGE E. WOODS resumed the stand.

The Master: As I understand it, Mr. Carter, you will give directions to your cashier to give the experts for the defendants access to those pay roll sheets and counsel are directed to instruct their engineers to look at them in the cashier's office, so that they won't be dragged around. Another book we have here, the statistical record, will be subject to access by defendants as counsel insists.

15029 Mr. O'Brien: I want to call your attention to the ruling made on page 3183 of the record:

"Mr. O'Brien: What distinction does the Master draw between this book and the other books that have been received in evidence?

"The Master: The distinction the Master draws is that in his opinion this general ledger, from the testimony of Mr. Brundage is a tabulation from the other books.

"You haven't the right to look at that book, Mr. Chambers, if it is not in evidence.

"Mr. Chambers: I thought we had the right to look at everything they have.

"The Master: You have the right to look at
15030 the books that support the books in evidence, the books and documents that support the books in evidence.

"Mr. Chambers: I thought we had the right to look at everything.

"The Master: No, you have the right to look at every document which in any way supports the books received in evidence."

The Master: Well, I know all that. I am going further today and giving them something that is not under that ruling.

Mr. O'Brien (reading):

"Mr. O'Brien: Your Honor's ruling and their proclamation was that the doors are right open, take anything.

"Mr. Ransom: They are.

"The Master: So far as I am concerned, I am just telling Mr. Chambers that as a matter of right he has no right to look at that book. If counsel for complainant has no objection, he can look at it, but at some other time because I am going on with this trial."

The Master: I am going further today and letting you look at a book to avoid further dis- 15032
cussion, because I think perhaps that is the quickest way to dispose of it. Now, go on with this witness. If I adhered to the ruling you have referred me to, I would not let you look at this book.

Mr. O'Brien: Now, your Honor, before I start my examination this morning, there is a couple of exhibits that I haven't got copies of, 351 and 355, and it has been a little confusing to me, and I say that at this time, so that if I appear to overlap something that has already been gone into, you will appreciate the position I am in. Judge Ransom says he thinks that he 15033
gave us a copy, and I am quite sure he has not.

The Master: Well, Mr. Ransom, under the circumstances, will have an extra copy made of those two exhibits.

Mr. Ransom: I have given either one or two copies of every one of these exhibits to either Mr. O'Brien or Mr. Edgerton.

The Master: Well, Judge Ransom, have another copy made, because I think you had better have another complete copy made anyhow. I will want a copy when I come to analyze these figures.

Mr. O'Brien: If you have the original of 353 somewhere, let me take it now.

The Master: I will let you ask any question that has not been covered, but the minute you overlap something that has already been covered, I will sustain an objection.

Mr. O'Brien: Well, as to that I will have to protect myself with an exception.

The Master: Sure. There is no use having the same thing asked and answered twice.

Mr. O'Brien: I am keenly conscious of the

15035 propriety of—

Mr. Ransom: 355 is only an exhibit for identification, which you have

The Master: Your experts probably have it.

Mr. O'Brien: Well, 351. While I am on that subject, I think the Judge should be cautioned He has got up and broken into my sentence when I am talking about something else.

Mr. Ransom: Mr. Edgerton or yourself has had a copy of all these exhibits.

Mr. O'Brien: Here is an exhibit; I don't know whether it is in evidence or not. I haven't got a copy of 350 or 351.

15036 Mr. Ransom: I personally gave to Mr. O'Brien that exhibit of which that is a part, an exhibit for identification. That is a part of Exhibit 358 for identification.

The Master: This here (indicating).

Mr. Ransom: Yes. Mr. Edgerton now calls Mr. O'Brien's attention to the fact that he has got it.

Mr. O'Brien: I did not say that I did not have 358. I did not say that I did not have 355. I asked Judge Ransom to let me have the original 355 for this examination. What I am saying is that I haven't got a copy of Exhibit 350.

The Master: Let me see 350, will you?

Mr. O'Brien: I haven't got a copy of it—351, rather. That is the first exhibit on Friday, October 17th, and I haven't got a copy of that exhibit.

Mr. Ransom: It was properly furnished to you.

The Master: My recollection is that of one of those papers there was a missing copy; there wasn't enough to go around.

Mr. Ransom: But I got two and gave them to him. 15038

The Master: Well, let us go ahead.

Mr. Ransom: I furnished the original of all these exhibits.

Mr. O'Brien: I don't say that absolutely. The Judge may be right. I am not so proud of my opinion, your Honor. I say that because you will understand the condition under which I am working when I come to examine as to that exhibit.

CROSS-EXAMINATION RESUMED BY MR. O'BRIEN:

Q. Now, Mr. Woods, before you proceed to give your other reasons, or amplify the reason already given for the change in the system in 1912, you said 15039 something about enriching the coal gas to make it twenty-two candle power. Now, what I want to ask you before we pass is, do you not from the time, 1906 to 1912, when you were making coal gas at Astoria, produce gas there of twenty-two candle power?

A. No.

Q. What candle power was it?

A. About fourteen or fifteen.

Q. Where did it go to?

15040 George E. Woods, Cross.

A. It went to Ravenswood, to the New Amsterdam Gas Company, and was enriched at that point.

Q. And was enriched at that point?

A. At Ravenswood, yes.

Q. And that enriching process at Ravenswood was continued up to 1912, was it?

A. Well, they do some enrichment now.

Q. And you still continue, do you, to enrich your coal gas at Ravenswood?

A. At times, yes.

Q. At times only.

15041 A. Partly. There are times that they do not enrich. If we are making a large quantity of coal gas, we may have some enriched at the Ravenswood works.

Q. Only when you are making large quantities, do you now have it enriched at Ravenswood?

A. We enrich pretty generally. We are doing some enrichment from the Ravenswood plant.

Q. And at that time the basis of compensation to the New Amsterdam Company for the enrichment of the coal gas, that is between 1906 and 1912, was what?

A. What do you mean by what?

Q. The basis of compensation to the other company

15042 for the enriching of the gas was what?

A. Upon the additional amount of oil that they required in the production of their water gas so that the mixture would produce a gas of commercial quality.

Q. Well, the enriching then of the coal gas was not done separately from the making of their water gas then, is that it?

A. No. They made water gas and the two would mix and combine, a high candle power water gas combined with the coal gas, the combination of the two making the commercial product?

Q. Where did that mixture take place, at what point in the process of manufacture of water gas at the New Amsterdam plant did the commingling take place?

A. At the outlet of the station meters of the New Amsterdam plant. From there it went into the holders, and the mixture took place just out of the outlet of the meters, before the water gas went into the holder, the two combined in the line and went into the holder.

Q. Then at that point, the outlet of the holder in the station there? 15044

A. That was going to the—

Q. (Interrupting.) The water gas was mixed with the coal gas?

A. That is the inlet of the holder, the outlet of the meter which is the inlet of the holder.

Q. The outlet of the holder?

A. The two gases mixed at the outlet of the meter, and at that point went into the holder, the mixture taking place in the line from the meter to the holder.

Q. The enriching of the coal gas which at that period was sent from the coal gas manufactory at Astoria to the New Amsterdam, took place by the mixture of the coal gas with the water gas. 15045

A. That is right.

Q. Then were there records kept at that time of the volume of water gas that came out of the station meter?

A. At Ravenswood?

Q. Yes.

A. Absolutely.

Q. You had your records of what it was in volume before it was commingled with the coal gas coming from Astoria?

A. Surely. The mixture was at the outlet of the

15046 George E. Woods, Cross.

meter, not the inlet. We measured the gas at Astoria and sent it down, knowing the amount of coal gas that we produced, and they measured their water gas going through their meter, and we measured ours, the Astoria measuring theirs at one point and the Ravenswood at another point, and at the outlet of the two they mixed, and we knew absolutely in both cases what gas was being made at each of the plants.

Q. And then where did it go?

A. It went into the holders from there.

Q. Was it tested before it went into the holders?

15047 A. The water gas was tested before it went into the holders, the mixture was tested after it left the holder, as it was leaving the holder.

Q. After it left the holder?

A. Leaving the holder.

Q. And where did it go to then, the output, through the tunnel?

A. Through the tunnel.

Q. The East River Gas Company's tunnel?

A. East River Gas Company's tunnel.

Q. Did any of it go back to Astoria?

A. No.

Q. None at all?

15048 A. No.

Q. During that early or later period?

A. No.

The Master: It went out into the distributing mains, did it?

The Witness: Into the distributing mains of New York City, through the transfer system and distributed throughout the city.

Q. Now, to get back to our main topic, you gave as one of the reasons for bringing into the system at

Astoria the water gas system, the fact that you needed to enrich the gas, the coal gas. Did you have in mind that you wanted to produce the water gas at Astoria for the enriching process rather than sending it down to Ravenswood? 15049

A. Not in particular. Enrichment by water gas is infinitely cheaper than a retort system which we spoke of yesterday in connection with Mr. Chambers' questions, because the oil efficiency is infinitely better in the operation of a water gas plant than it is in making a straight oil gas in retorts. That is an old system which was in vogue at the time of the—when 15050 naphtha was being used. The reason for that is the—

Q. The reason for what?

A. The reason for the efficiency, as to why we would rather a water gas enrichment in coal gas, is because we will get a better efficiency to the extent of ten or twelve per cent having a water gas machine, insofar as oil efficiency is concerned, rather than the retort system, because in one case you have the plain oil gas, and in the other you have the mixture of the hydrogen, which at the point of equilibrium in the machines, you will find it will carry a greater quantity of the oil gas which, if the hydrogen were not there, will either break down in the form of an 15051 oil vapor and drop out as a vapor, or it will be converted into a lamp black, and the result is that there is from ten to twelve increased efficiency on a water gas plant as compared with the retort system. That is one reason that we do not at any time try to make any more gas on an oil retort system than is possible.

Q. How many gallons of oil for the enriching of water gas do you use?

A. For enrichment?

Q. For the enrichment of water gas?

15052 George E. Woods, Cross.

A. About 1.6 gallons. You mean for water gas?

Q. For the coal gas?

The Master: Which is it you mean, Mr. O'Brien?

Mr. O'Brien: Coal gas.

The Master: Well, now, wait a minute.

Mr. O'Brien: Well, now, he says he uses, as I understand it, the water gas to enrich the coal gas.

The Master: Yes.

Mr. O'Brien: Putting additional oil into the

15053 water gas.

The Master: Yes, in other words he makes a higher power water gas, having in mind that it will mix with the low power coal gas and get an average of twenty-three. Now, what is it you want to get at now?

Q. How many gallons of oil, will you say, again?

The Master: For what? Now, it requires—

Mr. O'Brien: What excess amount of oil did you use to enrich the water gas?

The Master: Excess?

Mr. O'Brien: Yes.

The Master: All right. Now, as I understand

15054 the question, Mr. Woods, it is, "What excess amount of oil did you use."

Mr. O'Brien: Well, let him give the total amount of gas oil that he used to make this enriched water gas?

The Master: Which enriched water gas?

Mr. O'Brien: That is used in the mixture.

The Master: That is used at Ravenswood?

Mr. O'Brien: Yes, to enrich the water gas.

The Master: All right. Now, what was the total amount of oil used in the manufacture of water gas over in Ravenswood that you have testified was mixed with the coal gas?

The Witness: Your Honor, I could not testify to that with any accuracy at all. It would depend entirely on the ratio between the quantity of water gas that we are making and coal gas. For instance if we were making 1,000 feet of coal gas and 4,000 feet of water gas, the quantity of oil per thousand in the water gas would be less than if you were making 1,000 feet of coal gas and 3,000 feet of water gas.

By the Master:

Q. But this is the point, as I understand it: Over in Ravenswood you make water gas, don't you? 15056

A. We do.

Q. And you use a certain quantity of oil per thousand feet in making water gas, don't you?

A. That is right.

Q. How much?

A. The actual water gas will run from 3.98 to 4.20, depending on the time of the year—3.95.

Q. That is to make—

A. It will probably go down to as low as 3.80

Q. That is to make a twenty-two candle power gas?

A. On the district.

Q. Having in mind that you will want to mix that gas with the coal gas, you see— 15057

A. Yes.

Q. You have got to use more oil, haven't you?

A. Yes.

Q. And have to make a richer gas?

A. Right.

Q. How much additional oil do you use in that enriched gas that you make to mix with the coal gas?

A. Well, about from 1.5 to 1.6 gallons for every thousand feet of coal gas that must be enriched.

Q. That is the best answer you can give?

A. Yes.

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Q. So, depending upon the quantity of the coal gas to be enriched, you will find on the basis of about 1.5 to 1.6?

A. It would run from 1.4 to 1.30.

Q. Additional to the amount of oil gas that you use in the water gas for enriching purposes?

A. Yes.

By Mr. O'Brien:

Q. Suppose you mix 500 cubic feet of water gas with 500 cubic feet of coal gas, how much volume of oil, in addition, do you use for the enriching pur-

15059 poses?

The Master: A thousand cubic feet, that is the basis. A thousand cubic feet of water gas and a thousand cubic feet of coal gas. Use that basis, if you will. You will need for the water gas an additional 1.6 gallons of oil in order to make the proper mixture to bring it down to twenty-two on the service.

The Witness: Our actual figure, as I look at the Astoria enrichment for eight months is about 1.36 instead of 1.6, at this particular time, 1.6 gallons—1.36 gallons.

Mr. O'Brien: One what, 1.36?

15060 The Master: Is that right, Mr. Woods?

The Witness: 1.32.

The Master: 1.32?

The Witness: Yes, 1.32 is the figure.

The Master: That is much less than your estimate of 1.6?

The Witness: It is somewhat less, but this is somewhat low, I think. That is the figure which we have here.

Q. Well, would that be for a volume of a thousand cubic feet of coal gas plus a thousand cubic feet of water gas?

15061

A. Well, that might be. For instance, if we had 3,000 feet of water gas and 1,000 feet of coal gas and the 3,000 feet of water gas was of twenty-seven candle power and the other a fourteen candle, combining the two together, we will say that you would get a twenty-four candle power gas. Now, all you have to start with was 4,000 feet, and you wind up with 4,000 feet, and then we find that if we had cut out the coal gas, that the water gas instead of being, we will say 4.60 or 4.70, that they had used 4.10 or 4.15. The difference in what they would have used had the coal gas not been there and what they 15062
actually did use, was charged to the coal gas plant.

Mr. O'Brien: I don't follow that.

The Master: I think I do and that is why I want to ask this question.

By the Master:

Q. If you have 3000 cubic feet of water gas to mix with a thousand cubic feet of coal gas, you would need a less richer water gas to bring your coal gas up to 22, because you have three times as much water gas to work with; isn't that so?

A. Right.

Q. If you had on the other hand 1000 feet of water gas to mix with 4000 feet of coal gas, you would have 15063
a very much richer mixture in your water gas to get your average out?

A. You could not do it on a water gas proposition, your Honor, but that is right.

Q. To illustrate my point, that is the way it works out?

A. Yes.

By Mr. O'Brien:

Q. Well, then, take a thousand feet of coal gas, and you said in your simple statement a few minutes ago

15064 George E. Woods, Cross.

that you required 1.6, the figure that you subsequently modified?

A. Yes.

Q. 1.6 gallons for that extra enrichment per thousand cubic feet of coal gas?

Mr. Ransom: I object to the question. The witness has not modified any figure. He has simply stated a figure for a period of time that included certain summer months, whereas his original figure was for over a year.

The Master: Objection overruled.

15065 Mr. Ransom: He has not modified any statement.

The Master: Well, what difference does it make what Mr. O'Brien said.

Mr. Ransom: It makes some difference, quite a difference.

The Witness: I want to qualify that statement, because I made a mistake. May I do that, your Honor?

Mr. O'Brien: Is this a modification that is coming now, or something else?

Mr. Ransom: I don't know.

The Master: Do you want to add something

15066 to the answer already made?

The Witness: I want to qualify the statement as to what oil we actually used, because I read the wrong figure.

The Master: You said it was 1.32; what is it?

The Master: As a matter of fact it was 1.66. I did not understand how that figure was so low, but I was reading another column. It was 1.66 for the eight months and for the twelve months of 1918 it was 1.55.

By Mr. O'Brien:

Q. Mr. Woods, all of the coal gas made at Astoria was sent to Ravenswood in the period 1906 to 1912 for enrichment?

A. That is right.

The Master: That is before you put up the water gas plants at Astoria?

The Witness: Right.

Q. In other words, you did not enrich the coal gas at all?

A. We did not.

Q. At Astoria? 15068

A. No.

Q. Have you since the introduction of the water gas system at Astoria, done any enrichment of coal gas, apart from the enriching through the water gas?

A. We have not.

Q. Not even experimentally?

A. No, we have not. A mixture of coal gas with water gas, aside from the economy in oil for enrichment, Mr. O'Brien, makes a better product for commerical use than the plain oil enrichment with the coal gas, and while it is a commercial product, the other gas is somewhat better, and this is due to the 15069 fact that coal gas mixed with oil gas giving a high candle power of that quality, is of a low flame temperature, and requires a long flame for complete combustion. In other words, it requires a greater quantity of air per unit of gas for complete combustion, rather than with a water gas, which is of a high flame temperature, as a result of not requiring so much air. The result is that coal gas, enriched with plain oil gas gives a longer flame, requiring more air, and for commercial or domestic purposes, it is more likely to smoke and make soot on any receptacle which might

be too close to the burner. It is susceptible of adjustment, but—

Q. Where did you have that experience?

The Master: Let him finish his answer.

Mr. O'Brien: Of course, he is volunteering something, your Honor.

The Witness: As I said, both kinds can be used, but the other for commercial purposes is somewhat better than enriching with oil in the coal gas itself.

Q. That is the position you take?

15071 A. It is.

Q. And that is the result of experience somewhere?

A. It is.

Q. Where?

A. We enrich coal gas at 42nd Street, and for any one to analyze the quality of the gases, it is definitely determined that that is the result, because you can take the analysis of the gas and the tests and determine exactly what the flame temperatures are in each case, one requiring a longer flame for perfect combustion, and the other a shorter one.

Q. So that the result of the experience in the manufacture of coal gas at 42nd Street and at 14th Street was to discard that system?

15072 A. We have not discarded the system insofar as—

Q. You have abandoned it, haven't you?

A. We have always continued it at 42nd Street; it has never been abandoned.

Q. You don't mean it is actively engaged in there?

A. When we make coal gas at 42nd Street we use oil retorts for enriching, and the gas as made there is an enriched coal gas by means of oil.

Q. Yes, but you haven't made much gas there in the last ten years, have you?

A. Not a great deal.

Q. How much have you made, now that you are on that subject?

A. I do not recall. Up until 1906, through 1906, until the Astoria plant was started, we were running both 14th Street and 42nd Street at practically their maximum capacity during some periods of the year. The Astoria plant was a new plant and could operate more efficiently, and we used the Astoria plant from that time on, and reducing the 14th and 42nd Street plants down to a small amount, which would give us a fair operating condition of about a million cubic feet per day at each plant. 15074

Q. Now, you are talking about actual production, and not capacity?

A. I am talking about production.

Q. Actual production at a million a day—

A. At each plant.

Q. And that ran along for what years?

A. I think we ran from 1906 until 1915.

A. Yes.

Q. Now, you testified before the Stevens Investigating Committee?

A. I think I did, one day.

Q. Or rather, the old Gas Commission. You were before them? 15075

A. Yes, I think so.

Q. And also before the Stevens Investigating Committee?

A. I think I testified before the old gas commission. I don't think I testified before the Stevens Commission.

Q. I read from page 144 of the record in that investigation, Volume 1, the following: "Q. Then as to the next reason? A. The type of their apparatus is different and more up-to-date than we have at our coal gas stations down on Manhattan Island. They

have inclined retorts, and we have the old-fashioned horizontal that are small. They require a great deal of labor, and the use of a great deal more coke under the benches to keep them going, than the type of furnace they had in the Bronx." Do you recall that testimony with reference to the 42nd Street plants, 14th Street plants, and the Central Union plant?

A. I do not recall the testimony, but I think I would make the same statement as of today.

Q. You would not change that in any particular so far as your references to the 42nd Street and 14th
15077 Street plants are concerned?

A. That is right.

Q. At this time you were comparing them with the Central Union plant?

A. Probably.

Q. Now, you were asked in that investigation about the cost of making gas at the Central Union Gas Company, were you not?

A. I may have been. I have never read the testimony, Mr. O'Brien.

Q. Do you recall as to having been asked as to their producing gas at 28 cents per 1,000 cubic feet?

A. I do not recall.

15078 Q. You do not recall that that was one of the questions that led to your making a comparison between the 42nd Street and the 14th Street plants and the Central Union plant?

A. I do not, Mr. O'Brien, because I do not recall ever having read the testimony since I gave it.

Q. Was the antiquated condition or the disadvantages of the system, or the inefficiency that you speak of in a smoky flame the reason why you established a plant at Astoria to make coal gas under the new system?

A. No, coal gas insofar as quality is concerned,

could be made as well at 14th Street and 42nd Street as it can at Astoria.

Q. I am talking about expense now.

A. The question of going to Astoria was a question of extension, and naturally they put in the best that they could find.

Q. You carry the production at 42nd Street and 14th Street down to what year, 1912?

A. 1915.

Q. Since that time will you give us approximately the production of those plants?

A. It has been very small. I cannot give you the 15080
exact amounts. We only ran them twelve or fifteen or twenty days each year, had them fired, lighted up and ready for operation in case they were required. We do not operate them because we do not claim, or I do not claim, that they can be operated as efficient as some of the other plants, and the reason we do not operate them more is because if we have capacity at other plants, we do not operate those plants. If, however, we have those plants—

Mr. Ransom: Let him finish his answer.

Mr. O'Brien: I am going to choke him off on some of these voluntary statements.

Mr. Ransom: I ask that the witness be per- 15081
mitted to finish his answer.

The Master: Yes.

Mr. O'Brien: Of course, I do not suppose that I am compelled to let him talk an hour without cutting him off.

The Master: If it is responsive to your question.

Mr. O'Brien: Who is going to say when he should stop.

The Master: I think at that point you should ask to have the witness stop; object to any further proof. Read the question and answer.

(The stenographer repeated the question and answer.)

The Master: Yes, I think Mr. O'Brien is right, his question did not call for all of this.

Mr. O'Brien: I move to strike it all out except the first sentence.

The Master: I will let it stand, because it does not do any harm, but it is not responsive. You were simply asked to give the approximate amount of production in these plants. Limit yourself to the questions.

15083 Q. Tell us what it was.

The Master: He said about twelve or fifteen days a year.

Mr. O'Brien: No; that is just when they were fired up. I want the actual production of gas.

A. I cannot give you the exact figures.

Q. Get as near to it as you can?

A. I do not suppose it would average in that period, from 1915—I would say 25,000,000 a year at each plant, and I may be mistaken in that. The amount has been small.

Q. 25,000,000 a year?

A. Yes, at each plant, and I think that—

15084 Q. Did you not go there in the winter of 1917-1918?

A. Yes.

Q. Were you around there on New Year's eve, when it was started up?

A. On New Year's eve?

Q. Yes.

A. In 1918?

Q. Yes.

A. No, on New Year's eve I was—

Q. 1917-1918?

A. I was extremely busy. I remember New Year's

15085

eve particularly well, because I think I worked 18 hours at some other place, trying to give you and other people gas, Mr. O'Brien.

Q. Well, that is an alibi. You do not remember?

A. I do not recall.

Q. You do not remember the actual number of days it was worked?

A. I do not recall the time exactly. It was twelve or fifteen or eighteen days; I do not recall.

The Master: Is that for the year they only ran three or four days?

15086

Mr. Ransom: No, it is different—the time it was used and the time it was fired up.

Mr. O'Brien: I am trying to get the witness to state as near as he can the production of the last three or four years.

The Witness: The production has been extremely small and we have only operated it and got it in shape—

The Master: No.

Q. At both plants it was extremely small. Would it be the same 25,000,000 a year at both plants?

A. Yes, I do not think it would average more than that, Mr. O'Brien.

Q. It might be a good deal less?

15087

A. It might be somewhat less.

Q. There was some reason then, for ceasing to make a whole lot of gas at 42nd Street and 14th Street, under the system they have there?

A. Oh, yes, there was a reason.

Q. And for going to Astoria?

A. They have no particular reason for shutting that down and going to Astoria, but so far as extension was concerned it was believed that that was the logical place to go for their extensions.

Q. You have had right along the opinions you ex-

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pressed before the old gas commission as to these plants?

A. Well, whatever I expressed then was my view at that time, and is probably my view today.

Q. Where did you have the experiment about this smoking flame?

A. Why, it is a matter of no particular experiment, except to see an operation of that kind.

Q. You were connecting that proposition with the idea that the coal gas as then made was commercially not efficient?

15089 A. Yes.

Q. Where did you find that expressed? Did it crystalize in complaints of consumers or what?

A. Yes, to some extent.

Q. You sold the gas right along?

A. Yes.

Q. You sold it in large quantities?

A. We did.

Q. And you were paid just as much as other companies were paid for other kinds of gas at that time?

A. Right.

Q. How did it culminate in a desire to change the system?

15090 A. There was not any desire to change that particular system at that point. I am simply making the statement that both are commercial products, and one is a better quality of gas for industrial and commercial gas than the other. There would be some classes of industrial work, of heating certain types of furnaces, Mr. O'Brien, in which the coal gas might be better than water gas.

Q. Keep to the thing I have your mind on, and we will get along more rapidly. I am talking now about two plants; not a rambling field of plants. Where was the moving reason for adopting the other system?

The Master: What other system?

Mr. Ransom: There was no change in the system.

Mr. O'Brien: At Astoria.

Mr. Ransom: There is no change in system in that.

The Master: Was there a change in the system between Astoria and 42nd Street?

A. Except as to the new attachment, the trend of the times and improvements that had gone on.

The Master: More modern apparatus?

The Witness: Absolutely. 15092

Q. Not only that, but the question of the manner in which your coal gas is enriched, is different at Astoria than at 42nd Street; isn't that a fact?

A. Yes, because we can enrich it for less money. It is a matter of economy of operation. We can operate that way to better advantage and to a cheaper extent and make a better product for commercial purposes than we can the other way.

Q. At Astoria than at 14th Street?

A. It is better than the other, but both, however are commercial products.

Mr. Ransom: I object to the statement of counsel. There is no evidence in this case that the retort gas oil method is pursued at 14th Street. 15093

Mr. O'Brien: Are you trying to tell the witness what to say now?

Mr. Ransom: I am trying to keep you within some reasonable bounds of fact.

Mr. O'Brien: The witness knows the facts; he can correct them if they are wrong.

Mr. Ransom: Well, you do not.

Q. At 14th Street, if I have led you astray, Mr. Woods, will you correct the record now with refer-

ence to 14th Street? The coal gas there was enriched in what way?

A. At 14th Street, in my experience, it has been enriched in three ways.

Q. Name the periods now?

A. I cannot recall the exact times.

Q. Well, approximate them.

A. Well, from 1901 to possibly 1910 or 1911, I do not recall; it may have been a little earlier or later than that, that we used the retort system. That gas was made at the 21st Street plant in retorts and oil
15095 benches for the purpose of doing that work. It was probably a little earlier than 1910, but I cannot remember the date, Mr. O'Brien.

Q. I was correct to that extent, was I not?

A. At or about that time, and at a later period when our production was not quite as high there, I designed and put into 21st Street a machine for making a high candle power water gas, which instead of making an oil gas running 60 or 65 candles, this particular apparatus would make from 38 to 40 candles, and the one machine was of sufficient capacity to give the enrichment at the 14th Street works, with the quantity that we were making at that time. That
15096 plant was not of the particular type, and not as satisfactory or economical as the ordinary type or general type of the carbureted water type of plant, but it was better.

Q. How long did that experiment run, Mr. Woods?

A. I think we continued that practically through 1915, until we closed the plants down.

The Master: Where was the third system, then?

The Witness: The third system—whatever we have done since has simply been mixing with water gas and sending the vicious water gas

down, and I do not know, that system may have stopped in 1911 or 1912, your Honor, and then with the small amount of gas we were making it was enriched with the plain, straight carbureted water gas. That was 21st Street.

The Master: I think, Mr. O'Brien, you have drawn the picture of conditions at 42nd Street and 14th Street clearly.

Mr. O'Brien: I will depart from that a minute.

The Master: I think it is fair to assume from what the witness says that they were old plants, 15098
but not as efficient or economical to operate as the newer type of plant. I do not see that you can develop it any more than that.

Mr. O'Brien: It has a bearing in five or six different ways, your Honor.

The Master: But the point is developed, is it not?

Mr. O'Brien: I want to ask him now about the Mutual. He speaks about the system and tries to give a black eye to the coal gas system as a commercial product, and I want to ask him about the Mutual Company, how long they had the system.

15099

The Master: I will let you ask that.

Q. They had the coal gas system, did they not?

A. I do not think the Mutual ever had coal gas.

The Master: Am I to understand they make water gas?

The Witness: They do.

The Master: Carbureted water gas?

The Witness: Carbureted water gas. My recollection is, and this is historical and not first hand, that the first process there was a wood gas process.

The Master: A what?

The Witness: A wood gas process, which only ran but a short period of time; then they went to the Gale and Rand, which was an oil process and then they ran the Gale and Rand for a short time, and went to the Wilkinson process, that being practically the same as the Tessie du Motay, and then the intermittent process.

Q. Where do you get the idea that the Tessie du Motay process was used there?

A. The Tessie du Motay?

15101 Q. Yes, or anything approaching it?

A. It was in use in the plant at 42nd Street, the Tessie du Motay was in use.

Q. Just think it over a minute, and see if it was not the Wilkinson process?

A. Never at 42nd Street. The Wilkinson process was put in at the Mutual works. I said that the Wilkinson process was put in at the Mutual works. Dr. Wilkinson was the chemist for the Mutual Company. The process was almost identical to the Tessie du Motay; as a matter of fact I never could find any difference, and however Dr. Wilkinson got a patent I don't know.

15102 The Master: They went to water gas then?

The Witness: That was water gas. The Wilkinson was a water gas process.

The Master: Then they went to the carbureted water gas?

The Witness: Then they went to what they called the intermittent process.

Q. Before the Wilkinson process was put in they used the coal gas system?

A. I never knew they did. Before that my recollection is that it was the Gale and Rand. That is prior to my time.

Q. Coming back to the figures you gave before recess, the modified or corrected figure is 1.56—

A. 1.65, I think was the figure, was it not?

The Master: 1918 it was 1.56. For the period of 1918 it is 1.55.

The Witness: 1.55 for twelve months, your Honor, for 1918.

The Master: And 1.66 for 1919, was it not?

Mr. O'Brien: I have not got that quite clear.

The Witness: 1.66, that is right, your Honor.

Mr. O'Brien: 1.66?

The Master: For 1919, and 1.55 for 1918. 15104

Mr. O'Brien: I have not got that quite clearly in my mind yet.

Q. Mr. Woods, the relative volume of enriched water gas that it takes to bring the Astoria coal gas up to the standard—you spoke in one instance about it taking 1.6 gallons to enrich thousand cubic feet of coal gas?

The Master: No, that was his estimate.

Q. Then I asked you about that combined with 1,000 cubic feet of water gas, and we got some answer that was not entirely clarifying.

The Master: Wait a minute, Mr. O'Brien. It is not quite so important whether it is clear to 15105 you, as whether it is clear on the record and is clear to the Master. This is, as I understand the testimony of this witness up to this point. The taking of what Mr. Chambers termed a supposititious plant operating economically, in the manner that they operate over in Astoria, he said he had the Astoria plant in mind—it was his judgment as an expert, giving opinion evidence, that it would take 1.6 gallons of enriching oil to bring coal gas up to the required standard. Is that right?

The Witness: Yes.

The Master: He also testified that from actual experience over in the Astoria plant during the year 1919, it has taken somewhat more than that, namely, 1.66. For the year 1918 the actual experience at Astoria showed a little less than his estimate, namely, 1.55. So that his estimate of 1.6 is about midway between the actual result of operations at Astoria in 1918 and so far in 1919. Have I correctly stated it, Mr. Woods?

15107 The Witness: You have, your Honor.

The Master: That is perfectly clear to me and I think it is clear on the record. If it is not clear to you, I cannot help it; I will not permit any further questions.

Mr. O'Brien: Before the recess I tried to ask the witness a question. Later you took him in hand after I suggested that he give me an answer as to the joining of 1,000 feet of water gas to a thousand cubic feet of coal gas.

The Master: He said it could not be figured that way.

Mr. O'Brien: Whether they added 1.6 or whatever it was of oil to make that enriching element then he was asked about making it 3,000 cubic feet of water gas and 1,000 cubic feet of coal gas, and he gave some answer that I cannot understand. The point is I want to know what the relative volume of enriching water gas is to be used with a certain quantity of coal gas to enrich it. If you will give me those percentages I will have that cleared up.

15108

The Master: Let me see if I understand what is in your mind now. In other words, taking the basis that the witness has given of 1.6 of oil

for enriching purposes, what does he think is the relative proportion of coal gas to the water gas, or whether it would be 5 to 1 or 4 to 1?

Mr. O'Brien: Yes, that is it.

The Master: Tell us that.

The Witness: It may be anywhere from 2 1/2 to 1 to 6 to 1, your Honor, depending on the amount required. You can regulate that. You can go to the limit; 2 1/2 would be extremely low. I should say it would require three times the amount of water gas; that is, three parts of water gas to one of coal gas. If you made it 4 15110 parts of water gas to 1 of coal gas, then the water would be using less oil. The result would be the same. We would use five parts. For good operating conditions, as a minimum it would be about as 3 is to 1. For instance, as 3 is to 1 you would use a little more oil and make a higher candle power on your water gas; 4 to 1 you would use less oil and make a little lower candle power. But the relation would depend on those quantities. However, the result, no matter what the case may be, whether it is 3 to 1, 4 to 1, 5 to 1, the amount would be 1.6 gallons to every 1,000 cubic feet. 15111

By the Master:

Q. You could not take 1,000 cubic feet of water gas and mix it with 1,000 cubic feet of coal gas and get a result?

A. No.

Q. You could not do it with 2,000 cubic feet of water gas?

A. Not very well.

Q. You might do it with 2 1/2?

A. Yes.

Q. It might depend on the amount of water gas you

15112 George E. Woods, Cross.

mixed with the coal gas in results from that quantity up?

A. Yes

Q. As to the relative proportions of the mixture, they would depend upon the amount of coal gas that you used?

A. Yes.

Q. Would it amount to 1.6 approximately?

A. That is right, your Honor.

By Mr. O'Brien:

Q. So, if we take 1,000 cubic feet of coal gas and
15113 we admix with it 3,000 cubic feet of water gas additional enriched, we will have 4,000 cubic feet at least?

A. That is right.

Q. Of gas?

A. That is right.

Q. In that we will have used 1.6 gallons according to your latest figure, of additional gas oil?

Mr. Ransom: Not as his latest figure, but his original figure.

The Master: What difference does it make?

Mr. O'Brien: I am not trying to sneak something in here, your Honor.

15114 The Master: I know, but Judge Ransom gets wildly excited about the use of a word, which does not make any difference. Mr. O'Brien's statement is approximately correct, is it not?

The Witness: It is.

Q. Did you keep a measure of the amount of water gas that is turned into the commingling with the coal gas?

Mr. Ransom: I object to that.

The Master: Objection sustained; already covered.

Q. You stated this morning that you still send some gas down to Ravenswood to be enriched?

A. We do.

Q. Can you state approximately the amount that has been sent through from year to year since the introduction of the water gas system at Astoria?

A. I would not like to state. Probably 30 to 40 per cent at times.

The Master: Why is that.

Q. Would you say 30 to 40 per cent of the production of each year?

A. I should say it would be approximately that.

The Master: Why is that?

The Witness: Well, because we find in making 15116
that quantity of coal gas that we can't confine our entire make at Astoria and shut all our other plants down, that is cut them down to a point below efficiency, that is on account of the overhead, etc., and there is a limit of the gas during the summer months that for good economical operation we can run that plant.

The Master: Which plant, water gas?

The Witness: That is if we were making so much coal gas then we will have to make so much water gas at that point that it practically shuts everything else down, but in order to distribute it and give everybody an opportunity of 15117
making a certain amount of gas, a certain amount of it is sent to Ravenswood in order to—

The Master: Keep that plant going?

The Witness: To keep that plant going as well as the other.

Q. Keep it busy?

The Master: Now, you have made your point, go along. If you make a point with one question, why waste time?

Q. Well, that practice then would run back to 1912 of about 30, 40 or 50 per cent each year?

A. Yes, it is in that neighborhood.

Q. And that compensation paid to the New Amsterdam, is it based entirely upon the oil that is used or do you get additional compensation for the use of the equipment and facilities of the plant or the mains?

A. No. What we pay them, what the Astoria Company pays them is for the use of the oil, and while that oil is used they get a credit, because the operation of the plant and their machinery and everything, there is practically no difference between their
15119 enrichment and non-enrichment, in so far as the coal gas is concerned, and all that we pay them is for the excess oil that they have used in making that enrichment.

Q. You mean that there is nothing else to charge for so far as the commingling and the matrimonial phase of the gas down at Ravenswood?

A. That is right.

Q. Well, is there a formulae used or a fixed method of compensation running from year to year?

A. No. There is a fixed method of computation.

Q. Well, just what is it, and how does it change according to oil contracts?

15120 A. Well, nothing so far as oil contracts is concerned. It is the quantity of oil.

Q. Well, the oil costs money, so much a gallon?

A. Well, if they pay 5, 6, or 7 cents a gallon, and we have used—the Astoria Company has used 1.6 gallons of that oil for the enrichment of that coal gas, they pay the New Amsterdam Company at the price at which they are using that oil.

Q. Well, now, say you get back—you send on in a given year to Ravenswood to be enriched with the water gas 10,000,000 cubic feet of coal gas, for purposes of example, it goes down there and it is en-

riched and it comes back again, it goes out to the consumers. Now, what would be the charge credited to the New Amsterdam Company for what they have done to that gas?

A. The charge by the New Amsterdam Company to the Astoria Company would be—

Q. 10,000,000 cubic feet?

A. Would be the amount of oil that they required to enrich that coal gas to make it a commercial product. If it were 1.6 gallons it would be 1.6 times 10,000.

Q. Well, we will take the year 1917, and I find in 15122
the Astoria books a credit—a debit to the Astoria and a credit to the New Amsterdam Company for the enriching of coal gas that they have done for the Astoria Company during that year, expressed in terms of dollars?

A. Yes.

Q. How will I determine the amount of oil that has been charged in there, assuming that that year it was 10,000,000 cubic feet of gas produced or sent down there?

A. I believe I can give it to you now, Mr. O'Brien.

Q. Are you going to give me something theoretical or something from the books? 15123

A. Oh, no, no.

Q. 1917, you will remember.

A. I haven't—no, I will give you 1918, if you like it. I will give you the '18 figure.

The Master: Do you want that, Mr O'Brien?

Mr. O'Brien: Yes, I would like to have that.

The Master: Well, let us have 1918. What was the total amount charged in money?

The Witness: I think the total charge by the Ravenswood works to the Astoria Company would be $118,932.36.

15124 George E. Woods, Cross.

The Master: For the year?

The Witness: For the year.

The Master: Now, if Mr. O'Brien saw that figure, how would he find out what the rate was and the quantity?

The Witness: The rate that—I cannot give him the rate. I can give him the amount of gallons for which they charged the Astoria Company, and that is 2,017,112 gallons.

Q. For 40 to 50 per cent of the coal gas produced?

15125 A. That is right.

Q. By Astoria?

A. The Astoria Company.

Q. Give me all the factors that you have there while on the subject?

A. The Astoria water gas plant charges the Astoria coal gas plant for 2,766,655 gallons.

Q. Is it necessary to bring that in here?

A. (Continuing.) Of oil at 6.4 cents per gallon; the amount of money was $177,838.33.

The Master: And Ravenswood charged how much?

The Witness: Ravenswood $118,932.36.

15126 The Master: At what rate?

The Witness: The rate that is here, your Honor, in so far as the gas oil price is concerned, is not accurate, because it was with the tar credit. I haven't got the—they have given a price here, but it is not right, does not represent the actual price of the oil, and I would not like to give it because it does not seem—

Q. What is the price you have got there?

A. The price of the oil with the water gas tar credits which I have got on this figure, and there is a water gas tar credit, so that the cost as indicated

here is 5.9 cents, but their oil is probably costing them 6.40, or 6.39, just as in the case of the Astoria Company. They were working on the same contract, and the price of the oil was the same, but with the coal tar credits it brought it down to that amount. And the combination of the two would be $273,595.07, and the cost 8.91 cents per thousand feet of enrichment at the coal gas plant.

Q. How do you know the coal tar credits are included there?

A. How do I know? Because I have seen the statement on which they were made up, and I know the 15128
method of doing it.

Q. And by that you mean the annual report of the Astoria Company?

A. No, the Ravenswood Company. They send out a statement each month, and I examine the records, the amount of material used, and the tar credits resulting therefrom, from the production of tar during that month, and based upon the percentage of oil charged to the Astoria Company, they are credited for that same relative percentage of the actual water gas tar produced during each month.

Q. Well, now, we could take then 118 odd thou- 15129
sand that you have spoken of, the credit to the New Amsterdam Company for the enriching they have done to the Astoria coal gas during the year 1918 and divide that by, say, 45 per cent of the coal gas produced at Astoria, and we will get the rate?

A. The rate of what?

Q. The rate of the charge for the enriching?

A. I gave you the rate, the combination of the two for the entire enrichment.

Q. Well, this will check up your figuring, won't it?

A. I can check it up; I don't know whether you can or not.

15130 George E. Woods, Cross.

Q. Well, now, let me see if I have got the factors right. You have stated that at least from 40 to 50 per cent of all the coal gas made by the Astoria from year to year was sent down to the Ravenswood plant to be enriched, so that for 1918 we could take 40 to 50 per cent of the coal gas made and divide that into $118,000 and we will find out how much per thousand cubic feet you are charged for the enriching process?

A. If you find the ratio, if you took 40 per cent, you will find one figure, if you took 50 per cent you
15131 will find another. I don't know anything about it.

The Master: Well, isn't that gas measured?

The Witness: It is measured, yes.

The Master: Isn't there a record showing how much gas was sent down?

The Witness: There is.

The Master: Well, then, the basis to check is the actual amount metered down?

The Witness: That is a matter of record.

The Master: That is the basis to work on?

The Witness: Yes.

Q. And that would be the way presumably in which $118,000 was made up?

15132 A. Right.

Q. Well, doesn't that seem a very small amount?

Mr. Ransom: I object.

The Master: Objection sustained.

Q. Does that amount seem to verify your explanation?

Mr. Ransom: I object.

The Master: Objection sustained.

Mr. O'Brien: Well, this witness wants to correct himself from time to time, and I am giving him a chance to do it.

The Master: Next question.

Q. So, going back to the question that opened up this discussion at the close of yesterday's session, which was, the reasons why you introduced the water gas system in 1912, what were the other reasons Or, rather, let me get that thing clearly in my mind. You referred to the necessity of enriching. Now, you have diverted to the New Amsterdam plant. Am I to assume from what you said that the reason why you brought in the water gas system was that you wanted to do the enriching at Astoria and not down at New Amsterdam?

A. Not necessarily. 15134

Q. Clarify that first reason that you gave for the introduction of the water gas system at Astoria in 1912?

A. You asked a question, Mr. O'Brien yesterday in which you asked me if the original intention was to build four units instead of two. I said no. As a matter of fact I would be very glad—

Q. That is not the question.

A. I want to tell you now, because I want to get it straight.

Q. I will get to that later on. Go ahead on what I have asked you.

A. Repeat the question, please. 15135

Q. What was the first reason that you offered for the addition of a water gas system of making gas at Astoria in 1912?

A. Because we felt that under the conditions as to the capacities, etc., that we had—

Q. Now, don't get into that, et cetera. Tell us what the et cetera means, every word of it.

A. That we had ample coal gas capacity for our requirements under the conditions under which we were operating, and while we feel that we ought to have some coal gas that the ratio should not be to

any great extent greater than it is at the present moment.

Q. I will have to intercept. You are not answering my question.

Mr. Ransom: Mr. O'Brien wants to formulate not only the questions but the answers.

Mr. O'Brien: I have asked him the reason that led up to the introduction of the water gas system, and he is now proceeding to give us something in the present tense.

The Master: You testified yesterday, Mr.
15137 Woods in these words: "So long as we had to make 22 candle power gas it was infinitely better to go on a waterpower basis"—

The Witness: That should be water gas basis, instead of waterpower basis.

Q. "Than to make a large amount of coal gas with some oil enrichment." Is that the statement you have reference to?

Mr. O'Brien: Yes, that is it.

The Master: You want an explanation of that statement?

Mr. O'Brien: Yes.

The Master: I have read to you, Mr. Woods,
15138 the statement you made yesterday. Today you have testified that you were enriching this coal gas that you are making there at Ravenswood.

The Witness: Partly.

The Master: Will you please explain why it was necessary to put up a water gas plant at Astoria under the circumstances?

The Witness: The necessity for the water gas plant was because we required extension of some kind, and it was a question of whether we put in water gas or coal gas.

Q. Why do you say you required an extension, to take care of the increased business?

A. Absolutely. We are short of capacity now.

The Master: I don't think you let the witness finish that answer.

Mr. O'Brien: I will let him ramble on now to his heart's content, but I will get what I am after.

Mr. Ransom: I insist that counsel should not have a monopoly of the rambling.

The Master: I understood you to say it was necessary to have some extension?

The Witness: That is right.

The Master: And you thought it better to have a water gas extension than a coal gas ex- 15140
tension?

The Witness: That is right.

The Master: What has that to do with the statement that you made yesterday that so long as you had to make a 22 candle power gas it was better to go on a water gas basis?

The Witness: That had a bearing on it, because it required from 9 to 10 cents more, for the 1.6 gallons of oil, for coal gas enrichment, and I further amplified that question, I think, in that the question of the disposition of coke was a very material element in connection with it, that we must get rid of our coke, that if we were 15141
making a certain amount of coal gas and water gas, if we could not sell the coke we could use it for water gas production.

Mr. O'Brien: Wait a minute.

Mr. Ransom: Let him finish his answer.

Mr. O'Brien: That is another reason—

The Witness: The trouble is I am interrupted, and I lose my thought.

Q. I will simplify these questions for you, Mr. Woods.

A. I would like to finish this.

15142 George E. Woods, Cross.

Mr. Ransom: I would like to object, in this very difficult and intricate subject of manufacture, the tactics of Mr. O'Brien are habitually and persistently such as to prevent the witnesses who are discussing technical subjects from giving their answers. The moment they start he interrupts and prevents their giving anything like—

The Master: Well, that is speech No. 37, now. I have heard it thirty-seven times.

Mr. Ransom: I have to make it more.

15143 The Master: Mr. O'Brien, please don't interrup. the witness when he is trying to answer a question. The stenographer will go back and read the question that I think I put to the witness.

(Question and answer read by stenographer.)

The Master: Is there anything you want to add to that?

Mr. O'Brien: I want the first reason, your Honor.

The Master: Now, please, Mr. O'Brien. I want to give Mr. Woods a chance to get his thought and answer that question.

15144 Mr. O'Brien: He is not answering my question.

The Master: You will get a chance later, but I am going to have Mr. Woods answer this question fully and completely, and I will give him an hour to think it over if he wants it.

The Witness: What I was trying to get for your Honor's information was, we have felt always that what we needed was a combined coal and water gas plant, and that under the conditions under which we operate, and the trouble with the disposition of coke, that there is a limit

to the extent that we can make coal gas economically. We must dispose of the coke at a price, at a good price, because the residual return from coal gas depends very materially upon what it is going to cost to make it. We could not afford to store the coke, because if you should store 10,000 tons of coke, when you started to sell it you would have about 7,000 tons of good salable coke. The rest of it would be in the form of breeze, that I mentioned the other day, or dust. We have the advantage with some coal gas that if we cannot get anthracite coal we can use the 15146
product of our coal gas works in the production of water gas. The same thing applies, if there is trouble at the mines in the soft coal market, we can go to the anthracite field and make water gas, without coal gas operation.

Mr. O'Brien: Is your Honor going to permit—

The Master: Yes, I am going to let him finish this.

Mr. O'Brien: I am on record as recording an objection to his being allowed to talk *ad lib.*

The Master: Go on.

The Witness: The point is, with a large extension of the coal gas, that there would be a larger 15147
expenditure of money, and there would be periods of time when the operation of it would be such that it is extremely uneconomical, and it was along those lines that we were trying to establish some relation between the amount of fuel we can use from a coal gas plant and not be dependent upon market conditions that resulted in the installation of water gas instead of coal gas. The original design of the Astoria plant, as can be seen from drawings that were made back in 1901, 1902, 1903, call for the erection first of a

15148 George E. Woods, Cross.

20,000,000, two 10,000,000 units of coal gas, and following right alongside of that is one 40,000,000 cubic foot water gas unit, and following that is a 20,000,000, and another 40,000,000. That was the original design. What we have at the present time is one 20,000,000 cubic foot coal gas, and a 30,000,000 cubic water gas unit. The units were arranged in two 20,000,000 units, and one-half of it has been put up.

By the Master:

Q. You said the original plan was a 20,000,000 coal
15149 gas, and then a 40,000,000 water gas, and you put a 30,000,000 water gas?

A. At the time that was laid out it was expected we could put in that space two 20,000,000 cubic feet units. We have, however, in half the space, erected a 30,000,000 cubic foot unit.

Q. What I want to get clear on the record is why, when you originally contemplated a 20,000,000 coal gas unit, and alongside of that a 40,000,000 water gas unit, then another 20,000,000 coal gas unit, and another 40,000,000 water gas unit, you dropped your water gas unit from 40,000,000 to 30,000,000?

A. We did not. We really raised it. The original
15150 intention was to put in two 20,000,000 cubic foot units, making one unit of 20,000,000—

Q. You mean 20,000,000 coal gas or 20,000,000 water gas?

A. I may be a little indefinite there. The original intention as to coal gas installation was a 10,000,000 inclined plant, and one 10,000,000 horizontal plant, which made the 20,000,000 for coal gas. What we proposed to do then was to put in one 20,000,000 water gas, and follow that with another 20,000,000 water gas. What we actually did was to put in one 20,000,000, which we are now producing at the rate of

30,000,000 in that plant, so that where the original design was a layout for a 40,000,000 water gas, we will have a 60,000,000 instead of a 40,000,000.

Q. But up to this time it is 30,000,000 instead of 40,000,000?

A. It is, because we have only half our extensions.

Q. But up to this time you have two 10,000,000 units for coal gas, and one 30,000,000 unit for water gas?

A. That is right.

Q. Instead of two 20,000,000 water gas units you have one 30,000,000 water gas unit? 15152

A. That is right.

Q. So that up to this time you have less water gas than you figured on originally?

A. That is right.

The Master: Now, that is clear. Go on, Mr. O'Brien. Mr. Woods, please limit your answers to the questions, and only that, because I am going to cut short anything the minute you get beyond yes or no, or a mere statement of the facts called for by the question.

Mr. O'Brien: He has had a pretty long soliloquy here, your Honor. This has been going on for ten minutes. 15153

The Master: The witness was not talking to himself, he was talking to the Master, likewise he was talking to you and other counsel, and for the record. I didn't know that that was a soliloquy.

Mr. O'Brien: It depends on the point of view.

The Master: It depends on what understanding one gives to an English word.

By Mr. O'Brien:

Q. When you were asked first last evening about the change that you concluded to make in 1912 by in-

15154 George E. Woods, Cross.

troducing a water gas system, you started at once to say you found it necessary to make coal gas 22 candles, and you offered that as a reason for the installation at Astoria of the water gas system. Now, is there any difference between the method of enriching coal gas now in vogue at Astoria with a rich water gas, and the method that has been in vogue all along at Ravenswood?

Mr. Ransom: I object to the question.

The Master: That hand of Judge Ransom's is beginning to get on my nerves too. We will have
15155 an understanding here that you do not answer another question until I have asked Judge Ransom whether there is any objection. That will eliminate the hand operation. Let us hear that question again.

(Question read by stenographer.)

Mr. Ransom: I object to the question because in the preliminary part of Mr. O'Brien's question or remarks he assumes to state that there was a change in 1912, putting in a water gas system, whereas it clearly appears that that was the intention at the start, and there was no change at all. The only possible change which has been
15156 indicated by the testimony is a change in the size of the water gas unit.

The Master: Objection overruled. The witness will now answer the question, and Mr. O'Brien will not interrupt. Do you understand the question? What is the difference in the way that they enrich the coal gas now as compared with 1912?

The Witness: There is no difference.

The Master: That is all. Next question, Mr. O'Brien.

Q. Well, there wasn't any loss of efficiency in the

coal gas product that would cause you to enrich it with water gas at Astoria?

The Master: Any objection, Judge Ransom?

Mr. Ransom: No.

The Master: Answer the question.

A. Will you repeat that question?

(Question read by stenographer.)

A. I don't understand the question, what he means.

The Master: You don't understand that question?

The Witness: I don't know what he means.

Q. Was there any lack of efficiency in the quality 15158
of the coal gas produced at Astoria, and later enriched at Ravenswood, that required your introducing a water gas process at Astoria to enrich it?

A. There was not.

Q. Was the introduction of the system then a matter of convenience so that you would have the enriching done in the neighborhood where the coal gas was made?

A. The question was a matter of extension, as to what was necessary, and what was believed to be the right kind of extension we were going to make.

The Master: You have not answered the question. Was it a matter of convenience? 15159

The Witness: No, it was a matter of extensions.

The Master: The answer is no, it was not a matter of convenience.

The Witness: No, it was not a matter of convenience.

Q. Not at all a matter of convenience?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Entirely a matter of extension?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. When you say it was a matter of extension, you mean that you had increasing business to take care of, do you?

The Master: Objection sustained as already answered.

Mr. O'Brien: Exception.

Q. You had greater requirements for production that had to be taken care of?

The Master: Objection sustained, already answered.

15161 Q. How much more gas did you make in 1913 in Astoria, total production, than you did two years before?

A. I cannot give you the figure.

Q. Can you approximate it?

A. I would not try to.

Q. Have you any memorandum with you by which you can give us the increase in the production after you introduced the water gas system?

A. I have not.

Q. Can you approximate the amount of the increase in the volume of gas produced after you introduced the water gas system?

15162 A. I cannot.

Q. Was it one-third more, one-fifth more, one-tenth more?

A. I would not undertake to say. I have not the figure. I cannot tell.

Q. Don't you recall the relative amount of gas produced in those years?

A. If I had I would give it to you.

The Master: Do you recall?

The Witness: I do not.

Q. When the change was made by the introduction of the water gas system in 1912 what was the total capacity for water gas manufacture?

The Master: Where?

Q. In Astoria?

The Master: There wasn't any water gas manufacture in Astoria until they put in that water gas plant.

Mr. O'Brien: I say 1912. I am fixing the year when they first began to make it.

The Master: Then your question is inaccurate. Read the question.

(Question read by stenographer.)

The Master: You see you are asking him now for something that did not exist. 15164

Q. In the year 1912, when they first began to put that in, when did you start the manufacture of water gas at Astoria?

A. May, 1912.

Q. For that year what was the amount of production of water gas?

A. I cannot give you the figure; I don't remember.

Q. You would not attempt to approximate it in any way?

A. No.

Q. Would you for the following year?

A. I would not.

Q. Would you for 1914? 15165

A. I would not.

Q. For 1915?

A. No, I haven't that figure.

Q. 1916?

A. No.

Q. Can you give us the coal gas production there from your memory for any of those years?

A. Not from memory.

Q. Can you give us the coal gas production for any year from 1906 to 1912?

A. I would not from memory.

15166 George E. Woods, Cross.

Q. Would you state what the capacity was in 1912 for water gas?

A. It was designed for a 20,000,000 cubic foot plant.

The Master: 20,000,000 or 30,000,000?

The Witness: It was designed for a 20,000,000. We have been able to make some improvements whereby we have been able to get it to 30,000,000.

Q. What system of water gas did you start with?

A. The same as we have now.

15167 The Master: What is that?

The Witness: Carburetted water gas, the Williamson process.

Q. Did you start with the Lowe process over there?

A. It is a Lowe process, Lowe type of machine.

Q. What is the difference between the two machines?

The Master: Between what two machines?

Mr. O'Brien: The Lowe process and Williamson.

Mr. Ransom: I object—

The Master: He says the Williamson process is a Lowe process.

15168 Mr. O'Brien: Well, there is a distinction.

The Master: He says there is not.

Q. Is there any distinction between the two?

The Master: Is there any difference between them, Mr. Witness?

The Witness: The Lowe process is an intermittent process of making water gas.

The Master: And Williamson?

The Witness: Williamson is the same. There are various types and designs of the Lowe process.

The Master: The Williamson process is one of those various types?

The Witness: That is right.

Q. There is one cylinder in the Williamson process, isn't there?

A. In the Williamson it is a single shell machine.

Q. And there are three in the other?

A. Yes.

Q. They differ at least to that extent.

The Master: In what other ways?

The Witness: The U. G. I., or the Western Gas Machine, in one case they have three shells in a row, and in the other case they have the shell divided, separated by partitions, making it 15170 a three-shell machine.

Q. Mr. Woods, did you follow the testimony of Mr. Bradley in the original case?

A. I did not.

Q. Did you read the testimony of any of the representatives of the company in that case?

Mr. Ransom: I object as immaterial.

The Master: I will allow it.

A. I may have. I recall very little of the testimony.

Q. Would you be able to say whether or not there was ever any representation made by the company's representatives that they had planned from the beginning to have in part a water gas system at Astoria? 15171

Mr. Ransom: I object to the question.

The Master: The objection is sustained. The witness himself has said that thing. The witness himself has said that their plan always was to have a 10,000,000 gas plant of one type; another 10,000,000 plant of another type, a 20,000,000 water gas and another 20,000,000 water gas from the very start.

Mr. O'Brien: Well, that is not borne out by the testimony in the case, the sworn testimony of the representatives of the company.

15172 George E. Woods, Cross.

Mr. Ransom: I object to the statement of counsel.

The Master: In what case?

Mr. O'Brien: In the original case.

The Master: I don't care about the testimony in the original case. I am taking the testimony in this case.

Q. Have you got any plans now that show that lay-out, that were adopted back in 1901 and 1902?

A. We have.

Q. Have you got reports that indicate it?

15173 A. I don't know that we have the reports.

Q. Have you got a recommendation from Mr. Bradley, the chief engineer, that such a system, a combined system of water gas and coal gas, be adopted?

Mr. Ransom: I object to the question as wholly immaterial. What has that to do with it?

The Master: I will allow it for a minute.

Mr. Ransom: We are not trying the Astoria case today. There isn't any Astoria case.

The Master: No, but Mr. O'Brien's intimation yesterday was that the officers of this company instead of proceeding with coal gas plants and running them efficiently, undertook deliberately

15174 to put in water gas in order to use up a lot of oil, and I will let him develop that kind of a proposition if it is possible of development.

Mr. O'Brien: With the plaintiff's witnesses?

The Master: Any way you can. I do not think it is possible of development, but I will let you do it if you can.

Mr. O'Brien: Well, your Honor, on the point of the question of the plan that they had when they established the plant, I want to call your Honor's attention to the testimony of the witness yesterday afternoon.

The Master: Go ahead.

Mr. O'Brien: It is very clear, the record speaks for itself.

A. I don't know whether Mr. Bradley made a report or not.

The Master: All right. He doesn't know whether Mr. Bradley made a report.

Q. Were you present at conferences where this matter was discussed?

Mr. Ransom: I object as thoroughly immaterial.

The Master: Objection sustained as covered yesterday. 15176

Q. Did you state yesterday on your examination at any time, that they had intended to have as part of the system, a water gas system at Astoria?

Mr. Ransom: Objected to as immaterial, irrelevant and incompetent, the record speaks for itself.

The Master: I will allow it.

Mr. Ransom: Exception.

The Master: Did you make any such statement yesterday, Mr. Woods?

A. I don't remember whether I did or not, your Honor.

Q. Can you state— 15177

Mr. Ransom: The witness was not permitted to make any statement yesterday. We kept trying to get him to be permitted to finish his answers, and he was not allowed to up to the time adjournment was taken.

The Master: Go ahead, next question.

Mr. O'Brien: He is rambling again.

The Master: Well, go ahead.

Q. Will you state, Mr. Woods, why you were silent upon that point yesterday afternoon?

Mr. Ransom: I object to the question. The record shows that a persistent interruption, against which complainant's counsel protested vigorously, and did protest up to the time of adjournment, prevented an answer. You cannot say this witness was silent, when he was not permitted to answer.

Mr. O'Brien: There is the record (handing volume). Show me any place where he intimated when I went into it—

The Master: Answer the question why you
15179 were silent about it yesterday.

Mr. Ransom: Exception.

A. I did not know that I was silent, your Honor.

Q. You discussed this matter last night with Mr. Carter?

Mr. Ransom: I object to the question as immaterial and incompetent.

The Master: I will allow it. I was wondering why it was not asked about half past nine.

The Witness: No, I did talk with Mr. Carter, and I discussed the matter going uptown last night.

Q. You discussed your testimony?

15180 A. No; he simply said you would probably want to talk to me as to what we intended to do; that is, what the original plan was.

Q. Yes.

A. That is all.

Q. And he gave you his views?

A. He did not. I had my views.

Q. What did he tell you?

A. He did not tell me anything.

Q. What did he say?

A. I do not recall what he said.

Q. This conversation was in the automobile going uptown?

A. Yes.

Q. In his machine?

A. Yes.

Q. And did he say that I would perhaps ask you what was the original plan?

A. No; he said along the lines—you would probably want to ask me something about Astoria, as to why we did not put in coal gas.

Q. Well, I did ask you?

A. Yes, I know, but he said you probably would follow up this line; that is all he said.

Q. Did he say it would be a good thing to bring 15182
out the fact that you had from the beginning planned to have a water gas plant over there?

A. He did not.

Q. Did you tell him that you would make such a statement today?

A. No, I said as a matter of fact, to him, as a matter of fact, we have got drawings showing that was the original intention.

Q. You had drawings?

A. Yes.

Q. They were tentative drawings?

A. Absolutely, because we have not finished them.

Q. If that be so, that you had a determination from 15183
the beginning, that is, 1901 and 1902, when Mr. Bradley went abroad to study this subject of putting in water gas systems plus coal gas, why didn't you put it in in the beginning and say from 1906 to 1912?

A. Because we would have had a lot of

The Master: Wait a minute. That calls for a speech, and I do not want that speech interrupted, until he is finished. I am just warning you. You have asked for a speech, and he is going to give it.

Mr. O'Brien: I have asked for information.

The Master: You asked him why it was not done, and I will let him tell, without interruption, why it was not done, and I am warning you in advance. Why wasn't it done, Mr. Woods?

Mr. O'Brien: Well, I might occasionally raise my small, lily-white hand to intercept the witness.

The Master: No, you can't prevent him telling us in the broadest fashion why it was not done.

Mr. O'Brien: All I want is the naked truth

The Master: You want an answer to that

15185 question, and you will get it now.

The Witness: Because it was believed at that time that the first initial installation would be that for coal gas, which we proceeded to do. To make any further extension at that time, when the requirements of the company did not warrant the expenditure of any money for such an installation, would have been foolish. We waited until the moment the company required additional extension for that plant, and when that time came the water gas plant was installed.

Q. I still press the question, Mr. Woods, as to why if you had the idea that this mixed system of

15186 water gas plus coal gas was the ideal thing—why you did not from the beginning in 1906, have both systems running, making less coal gas than you did, and some water gas, to mix with it and enrich it?

A. Because we had ample water gas capacity at that time, and we felt—

Q. (Interposing.) You mean in Manhattan?

A. In Manhattan; and what extensions we had it would be logical thing to go into and make more coal gas than we had been doing.

The Master: Well, originally and for a long while, you mixed the coal gas at Astoria with enriched water gas, did you not?

The Witness: We did.

Mr. O'Brien: And they are doing it there yet to the extent of 40 or 50 per cent, your Honor.

The Master: Yes, but what I mean is when they started these plants at Astoria, it was not necessary to have additional water gas plant for the purpose of mixing it; you had it down in Ravenswood, did you not?

The Witness: We did, and the only time we considered an extension there was when the requirements called for extension of the plant. 15188

Q. Is it not a fact that you started an all coal gas proposition over there in 1906 because you wanted to get away from this high price of oil?

A. We wanted to combine water gas and coal gas plant, so we could take advantage of both conditions.

Q. It was an idea of keeping an anchor to windward, was it not?

A. Absolutely, it was—

Mr. Ransom: Let him finish the answer.

The Master: Yes.

The Witness: So that to certain extent with the change in the price of oil and the change in the price of coal, we to a certain extent could take 15189 advantage of those changes, and operate under the most favorable conditions for the company and for the consumer. It was with the idea that it would be a benefit to the company by having a certain amount of coal gas installation.

Q. I understood you to intimate here this morning that by bringing in the water gas system at Astoria, you were saving about ten cents in the cost of making the coal gas?

The Master: That does not require an answer; that is a statement of what Mr. O'Brien understood.

Q. Well, is that correct, Mr. Woods?

Mr. Ransom: I object to the question.

The Master: I will not allow that.

Mr. Ransom: It is not an accurate statement.

The Master: You will have to reframe the question, so I can gather what you mean.

Q. Was one of the purposes introducing the water gas system so that you could enrich the coal gas with the water gas, the purpose of saving money in the making of the coal gas?

15191 Mr. Ransom: I object to the question as having been already asked and answered.

The Master: I will allow that.

A. No, the question of the extension of the water gas is because we required capacity, and simply the fact of having the water gas plant there for enriching purposes, did not cheapen the coal gas product, because we were having that done at the Ravenswood plant.

Q. So that the enriching of the coal gas was not done any cheaper by having made on the spot there the water gas, than it was and is still at Ravenswood?

15192 A. That is right.

Q. Which is the cheaper system, if there is any difference in the cost?

A. There is practically no difference.

Q. Practically no difference?

A. No.

The Master: Between what?

A. Between enrichment at Astoria and enrichment at Ravenswood.

Q. But there is a good deal of difference between the making of coal gas and water gas?

A. That is the question he asked me, your Honor.

The Master: That is what I understood it to be.

Mr. O'Brien: He got the question right, your Honor. He says there is no difference in enriching it at one place and enriching it at the other.

The Master: All right, go ahead.

Mr. Ransom: So far as enriching it is concerned.

By Mr. O'Brien:

Q. Was this innovation, if I may use the word, of mixing water gas with coal gas, or having both systems working at once—was that coming into vogue 15194
in 1905 generally in this country?

A. No, wherever they have a combined coal and water gas plant that was being done, and probably did it at the Central Union Gas Company.

Q. Was the Central Union a combined coal and water gas plant?

A. Yes. It had been done a good many years before that.

Q. By the way; is the system of making the water gas the same at New Amsterdam as it is at Astoria?

A. They have the Lowe type. It is a three shell apparatus instead of a single shell. It is the same as we have in New York here.

15195

Q. Do you recall just how far this practice was extending and when it began, of setting up both systems for making gas?

A. Oh, there are many plants throughout the country have had combined coal and water gas plants for exactly the same reason as we had.

By the Master:

Q. For how many years; how far back?

A. Well, your Honor, there were many plants that were coal gas plants when water gas came in, and they built a water gas installation alongside of their coal gas plants.

15196 George E. Woods, Cross.

Q. How long ago has that been done?

A. I should say back as far as 1884.

Q. A good many years?

A. Yes, sir.

Q. Back of 1905?

A. Yes.

By Mr. O'Brien:

Q. We may sum it all up by saying the plant had as one of its cardinal purposes, then the protecting of the company from the control of people who might sell oil and the price that they might put upon it?

15197 The Master: That is not a correct summary.

Mr. Ransom: The witness has not testified to that at all.

The Master: I will not allow the question. The witness's testimony is that it was intended to guard them against a sudden exorbitant price of oil or coal, as the price might be.

Mr. Ransom: And enable them to handle their coke on the spot.

The Master: That is correct, is it not?

The Witness: That is right.

The Master: In other words, you were preparing yourselves against a possible coal shortage?

15198 A. That is right.

Q. And a tremendous increase in the price of coal?

A. Right.

Q. Which might come at any time?

A. Right.

Q. Or a possible shortage in oil, or a tremendous increase in the price of oil that might come any minute?

A. Right.

Mr. Ransom: Your Honor has left out of that the matter of handling coke. That is a very important item.

Mr. O'Brien: I am coming to that in a minute.

The Master: I know it is important, but on the question we are talking about, it is not.

Mr. Ransom: It is the only basis on which you can make gas anywhere.

By Mr. O'Brien:

Q. In other words, Mr. Woods, as I may put it, paraphrasing his Honor's statement of it, it was to provide a cyclone cellar from the high price of oil or the high price of coal?

Mr. Ransom: I object to the statement as 15200
inaccurate and as incomplete.

The Master: Have you seen a cyclone cellar?

Mr. Ransom: Yes, sir, I have been in them.

The Master: Then you are some authority on them. I have never seen it, and Mr. O'Brien, I do not think, has ever seen it.

Mr. Ransom: And Colonel Hayward has seen it.

The Master: We will let that question out. I am not going to permit these comparisons with wild things that I have never seen and that the witness has never seen, nor yourself.

Q. In other words, you wanted to put yourself in 15201
the position where you would not be the victims of the high price of coal or the high price of oil?

Mr. Ransom: I object to the question.

The Master: I think it has been fully covered. I will sustain the objection.

Q. Mr. Woods, so that we may be fully fair to you and your counsel, were there any other reasons than those you have mentioned, for the changing or introduction, rather, in 1912, of the water gas system, such as handling of coke?

15202 George E. Woods, Cross.

A. The handling of coke in so far as the operation of the water gas plant is concerned, it was a logical place to put the water gas plant.

By the Master:

Q. You have told us the reasons for building this extension as a water gas system?

A. Right.

Q. You have given us various reasons for it, the underlying thought in the minds of the engineers and the company. Is there any other reason you want to give Mr. O'Brien for that water gas extension than

15203 those already given?

Mr. Ransom: I think that is what he was doing.

A. As to why we put the water gas plant there, your Honor?

Q. Yes, anything in addition to what you have already told us.

A. I was trying to bring out that so long as we had to have an extension, and we were going into water gas, that the Astoria plant was the logical place for it, because we could transfer the coke directly from the retort houses into the generator plant with exceedingly less breakage than we have by shipping

15204 it, and saving all the expense of conveying to New York City and various places for the disposal.

Mr. O'Brien: You see, your Honor, he starts with the assumption that it was necessary to put the water gas plant over there. He starts with assuming what I have been asking him about.

Q. That was a reason for putting the water gas plant over there?

A. Right.

Q. But that is no reason why you took on water gas at that time, instead of additional coal, is it?

A. No, that would not apply to that.

Q. Is there any other reason why you extended on water gas, instead of extending on coal gas at that time, other than what you have given us?

A. I have undertaken to cover that, your Honor.

The Master: Next question.

By Mr. O'Brien:

Q. You said that one of the reasons for introducing the water gas system in 1912 was that it was a matter of extensions. Do you mean by that that the other plants of the complainant company were fully extended, were up to their fullest capacity, and could not be used any more to take care of your consumers? 15206

A. Right.

Q. And that as of what year?

A. Well, you have to anticipate a year or two in advance, Mr. O'Brien.

Q. What was your production? This was planned now in 1902; that is the year Mr. Bradley took the trip abroad. What was your production in 1902 at each of your plants?

A. You mean the capacity of the plants?

Q. Capacity, yes, and then the production.

A. Well, I do not recall what the production was. The capacity of the plants was 5,000,000 at 14th Street; four and a half at 42nd Street. My recollection of 21st Street as of the time was 24,000,000. 15207

Q. How much, four?

A. Twenty-four.

Q. At 21st Street?

A. 21st Street.

Q. Was not that 27?

A. No.

Q. Including oil, I mean?

A. No, not as of that time. 24,000,000 was—

The Master: Full capacity?

The Witness: Yes. 44th Street was, I think at that time, about eight and a half million.

The Master: 99th Street?

The Witness: 99th Street, I think, was five.

Q. Five million?

A. I think so.

Q. So you had a capacity then, of 47,000,000?

A. Evidently.

Q. You also had the aid of the affiliated companies. You were transferring gas at that time, were you not, from the other companies?

15209 A. The transferring of gas started about 1901.

Q. And the Welsbach burner was in use at that time?

A. It was, yes.

Q. And it cut down for a number of years the increase in the use of gas, did it not?

A. It did not.

Q. It did not?

A. The Welsbach burner may have cut it down, but the installation of fuel appliances for domestic purposes and so forth kept it going the other way.

Q. When did they begin to introduce the cooking appliances?

15210 A. I do not know. When I went into the business in 1884 we were setting gas stoves. I do not know just what time they started in New York. I think, however, it was in the 90's that that was started to any extent. My recollection is that they started to make a drive on that in the middle of the 90's.

Q. When did the Welsbach burner come into use?

A. I do not know. I should say around 1900. I do not know the date, Mr. O'Brien.

Q. 1900? Are you not getting that mixed up with 1890?

A. It might have been 1890. It possibly was.

Q. Just say if your memory is not right on it.

A. Well, I do not recall.

Q. Can you say definitely as to how general its use was over those years?

A. No, I cannot.

Q. You do not recall that you have gone into that subject very deeply?

Mr. Ransom: I object to the question. These questions as to the Welsbach burners is immaterial.

Mr. O'Brien: Not immaterial at all. It had to do very seriously with the amount of gas made, your Honor. He has made the assertion, your 15212
Honor, that they were led over to Astoria, led to extend themselves there before they had reached their capacity; that the amount of production had reached the capacity of the plants and he stated here in 1902, when Mr. Bradley started these investigations and went abroad, it was 47,000,000.

The Master: In 1912 he was talking about the 47,000,000.

Mr. O'Brien: Oh, no.

The Master: When were you talking about these capacities, as of 1902 or 1912?

The Witness: 1902.

Mr. Ransom: If they kept selling more gas 15213
what difference does it make about the Welsbach burner?

The Master: I will allow the question.

Mr. Ransom: Exception.

The Master: Have you looked into the Welsbach burner situation deeply?

The Witness: I was interested in the development of the Welsbach burner.

Q. I mean, Mr. Woods, do you recall that you made any study of the effect of the use of the Welsbach burner on the amount of gas used, of the complainant company?

15214 George E. Woods, Cross.

A. Well, we do know that the Welsbach burner would use less gas as a flat flame burner, whether it would affect the extent of our business it is hard to say, because it was increasing.

Q. Was there any increase—now get this question—in the gas consumed of the complainant company from 1890 to 1898?

A. I should say yes.

Q. Is that your memory on that?

A. It is. 1890 to 1898?

Q. Yes, sir.

15215 A. Of the Consolidated Gas Company?

Q. Yes, sir.

A. No, I will qualify that statement by saying that I did not go to work for the Consolidated Gas Company until 1901, and I will have to state that I do not know. In so far as the Standard Gas Light Company is concerned I will say yes.

Q. You say the capacity was 47,000,000 in 1902?

A. I said approximately that.

Mr. Ransom: He has not said that. You said it; he did not.

Mr. O'Brien: He gave us the factors.

The Master: The next question.

15216 Mr. Ransom: He gave you approximate figures and you added them up.

Mr. O'Brien: Well, I will say approximately.

Q. You say approximately, Mr. Woods, that the total capacity in 1902 of the complainant's plant was about 47,000,000. Will you say what was the amount produced at that time, in that year?

A. I could not tell you.

Q. Can you say how near to the capacity the production went?

A. I would not undertake to say at the moment. I should say that our plants during the winter were pretty well up to capacity. You must understand as of

1902, Mr. O'Brien, that it required three years to build that plant, and if we had been to the limit in 1902 the Lord knows what would have happened in 1906.

Q. Yes, you were looking ahead?

A. Absolutely.

Q. We will concede you were looking ahead and provident of the future. At that time about 1902 how far had the use of electricity come into vogue for lighting purposes?

A. Well, quite extensively.

Q. It was increasing rapidly, was it not? 15218

A. Yes, more since that time. We have still continued to increase from year to year, notwithstanding that.

Q. It had a serious effect on the amount of gas consumed, did it not?

A. It had an effect. There is no doubt about it having an effect.

Q. Has it not increased in a far greater ratio than the increase in the use of gas?

Mr. Ransom: I object to the question as immaterial. What is the use of speculating as to how much more gas we would have used?

The Master: I will sustain that objection. 15219

Mr. O'Brien: It is in this case, your Honor; do not forget that. Your Honor, I am going to the question as to whether or not they had to build the Astoria plant—whether he has given us a reason when he says it was entirely—one time in his testimony he said it was entirely due to extensions.

The Master: I will sustain that last objection.

Mr. Ransom: The question is how much they sold.

Mr. O'Brien: As to the question of the use of electricity, we hope before the case is over to

show the bearing which this promoting of the electric light feature of the complainant's business has had upon the gas industry.

Mr. Ransom: That that is what has increased our sales?

Mr. O'Brien: You have got a money making proposition in electric light and you promoted it to the detriment of the gas business.

Mr. Ransom: That is why the gas sales have gone up, I suppose?

The Master: If I could sell electric power at
15221 a profit I would be anxious to do that very thing. The question here is whether they are losing money selling gas, that is all. If they are losing money selling gas I do not blame them for selling electricity at a profit.

Mr. O'Brien: That is all right, but while the gas decision says you cannot recoup your losses in the gas making business by the profits from the electric light, there is a different situation here from that of a municipal gas company. We are to inquire into the relations of the two businesses, and whether they have not promoted one as against the other. For this reason, you have
15222 heard it right here today or you will hear it before we get through with coke—the assertion that we could not market the coke because there was an element of economy involved, and we would cut our throats if we set out to sell coke. They will tell you in one breath that the coke industry, that the coke business has a serious relation to the question of the gas business, gas being used for cooking and heating as well as lighting purposes. In the same breath they will deny that the electric business, the method in which it is promoted, the money that is spent in developing that branch of the business has any connection

in a rate case with the price of gas making. It has a serious relation, your Honor. It has a serious relation if they are using all of the equipment, all of the promotion plants, all of the energies, or part of them, and all of the ingenuity and financial acumen of this company to push up this electric light business and make all kinds of money to the detriment of the gas business. It is important here.

The Master: Mr. O'Brien, that all sounds very pretty, but if I am losing one cent a thousand, and I sell a billion at one cent a thousand 15224
lower, I am not going to try to sell ten billion and have a greater loss.

Mr. Ransom: How much does Mr. O'Brien think our gas promotion expenses ought to be?

The Master: The question is what does it cost them to distribute gas?

Mr. O'Brien: This has not gone on in the days when they claim they were doing it at a loss, but when they were making money out of it.

The Master: The next question. I have ruled out the question asking Mr. Woods whether the use of electricity has not progressed out of proportion to gas.

15225

Mr. O'Brien: I respectfully except. I submit, your Honor, that the question of the use of electricity, being rapidly at the time I am speaking of, 1902, has had a serious bearing upon the reliability of the witness's testimony as to the reason for the extension of the plant at Astoria.

The Master: The objection is sustained.

Mr. O'Brien: Exception.

Adjourned to Wednesday, October 22, 1919, at 9:15 o'clock A. M.

Last Complainant's Exhibit No. 358.
Last Defendants' Exhibit MM.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 15229

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, October 22, 1919.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 15230
MR. O'BRIEN, of Counsel for defendant Swann.

GEORGE E. WOODS, resumed the stand.

CROSS-EXAMINATION CONTINUED BY MR. O'BRIEN:

Q. Mr. Woods, have you given us all the reasons now for the introduction of the water gas system at Astoria? I mean the reasons that the company, the engineers had, Mr. Bradley had, for introducing a water gas system in 1912? 15231

Mr. Ransom: I object to the question.

The Master: Question allowed.

Mr. Ransom: How could he testify as to all the reasons that Mr. Bradley had or the company had?

The Master: It is perfectly easy for the witness to answer the question. If he knows he will tell us. If he does not know he will not.

Mr. Ransom: How could he say?

The Master: I don't know.

15232 George E. Woods, Cross.

Mr. Ransom: It is not within the bounds of possibility that he should know.

The Master: I do not know; Mr. Bradley may have told him.

Mr. Ransom: How could he tell him it was all?

The Master: He may have told him that.

A. I do not know whether the officers or Mr. Bradley had any more reasons than I have given.

Q. Can you think of any other reasons—not the purpose that you have since found was served from
15233 going there, but the purpose that you had in mind in introducing that system?

Mr. Ransom: I object to the question as incompetent, immaterial, not proper cross-examination.

The Master: The question is allowed.

Mr. Ransom: Exception.

A. Just at the moment I do not think of any other reason.

Q. What did you consider to be a unit when they discussed units in connection with the Astoria plant?

A. Coal gas in 10,000,000 foot units.

Q. Ten million foot units?

15234 A. Yes, daily capacity.

Q. That would constitute how many benches?

A. That would depend entirely on the number of retorts to the bench, the size of them, and so forth.

Q. At that time, what was considered a unit?

A. Well, in the incline house we have—

The Master: No, Mr. O'Brien, the question is, when you were discussing a 10,000,000-foot unit, what did you mean by a 10,000,000-foot unit?

The Witness: Capable of making 10,000,000 cubic feet per day.

The Master: The original plan was for a ten

million coal gas unit and a twenty million water gas unit; then another ten million coal gas unit and another twenty million water gas unit?

The Witness: No, your Honor, the original plan was to build two ten million coal gas units, which we did, a twenty million capacity plant consisting of the two units, and then we were to extend on the water gas, first putting up one twenty million water gas unit and then another twenty million water gas unit.

The Master: That is what I mean; those are units you had in mind? 15236

The Witness: Yes, sir.

The Master: Foot capacity?

The Witness: Cubic feet daily capacity.

The Master: When I talk of "foot," I mean cubic feet.

Q. When you said you had that in mind, I mean the two water gas units, and then—I mean two coal gas units and then two water gas units?

A. Yes, sir.

Q. And then some other water gas units?

A. As I said yesterday, the original layout was a twenty million coal gas plant and a forty million water gas plant and a twenty million coal gas plant. 15237

Q. And was this your plan, or was it some plan that was adopted by the company?

A. It was a general layout, a tentative plan; of course we did not know what we were going to do eventually, but that was a tentative plan as of that time.

Q. As of what time?

A. As of the time of construction of the plant, in 1903, which, of course—

Q. (Interposing.) Did you not lead us to believe yesterday that they had a definite plan.

15238 George E. Woods, Cross.

A. They had a definite plan; that is—

Q. To put in a water gas system?

A. They did, yes, sir.

Q. That they determined to add to that after they had the coal gas system, to the capacity of 20,000,000?

A. That was the original intention, yes.

Q. Now, get that right; what do you mean by the original intention?

Mr. Ransom: I object to the question. This is wholly outside the issues here; as to what he means by original intention has been all gone
15239 over.

The Master: The question is allowed. I think Mr. O'Brien has fully covered the matter, but I am letting him go a few minutes to see if he—

Mr. O'Brien: I just want to get it definite.

The Master: I think it is fairly definite, but I will let him answer it again.

A. What is the question?

Q. When they finally adopted the plans for Astoria and determined to build there?

A. A 20,000,000 coal gas plant, after which they were to put up a 40,000,000 water gas plant.

The Master: In two units of twenty each?

15240 The Witness: That is right, your Honor.

Q. That determination was arrived at at what time?

A. At the time they started work on the coal gas plant?

Q. And that was back when?

The Master: 1902 or 1903.

Mr. O'Brien: 1902 or 1903.

Q. I read you here from a transcript of the record—

Mr. Ransom: Just a moment.

Mr. O'Brien: You are not saying "just a moment" to me, are you?

Mr. Ransom: I do, because you know you have

no right to read from the testimony of other witnesses to this witness.

The Master: I will not permit Mr. O'Brien to read from the testimony of other witnesses to this witness.

Mr. O'Brien: I am going to hand him this record and ask him if it refreshes his memory.

The Master: Yes, without asking him the question by reading what it says.

Mr. O'Brien: I submit that I have a right to talk without interruption.

The Master: You have. 15242

Mr. O'Brien: And he can make his objection after I have made my statement. I think I ought to be able to talk for three words without getting the traffic policeman's S. O. S., you know.

The Master: I agree with you. I have been trying to get Judge Ransom not to interrupt.

Q. Mr. Woods, I call your attention to page 583, Volume 2, of the transcript of the record in the original Consolidated Company case, and ask you to read the questions and answers, the two last questions and answers at the bottom of that page, and the answer at the top of page 584, which reads as follows—

Mr. Ransom: I object to his reading it. 15243

The Master: No, I will not let you read it. Let the witness look at it. I am not going to let you put matter like that in the record.

Q. I ask you if that will refresh your memory now as to what was the determination of the complainant company in reference to the establishment of a coal gas system and the plan adopted (handing volume to witness)?

The Master: I understand, Mr. O'Brien, that is not testimony given by this witness on the previous trial?

15244 George E. Woods, Cross.

Mr. O'Brien: No, this is the chief engineer, Bradley's statement—positive statement on the proposition.

The Master: I just wanted to make it clear that it was not Mr. Woods' statement. What is your answer? Does it refresh your recollection?

A. I have no change to make in my answer, your Honor.

The Master: What?

The Witness: I have no change to make in my answer.

15245 The Master: Of changing your answer?

The Witness: No, not in any way.

Q. Is your view different from Mr. Bradley's?

A. I do not think Mr. Bradley's view was any different.

The Master: What is that?

The Witness. I do not think that Mr. Bradley's view was any different from the view I have given just now.

Q. Mr. Bradley is still with the company?

A. He is.

Q. Mr. Bradley has been in court here since this trial began?

15246 A. Not that I know of.

Q. He is still drawing a salary in the company, is he not?

A. He is employed by the company.

The Master: Did I not understand somebody to say he is a very old man and was sick or something?

Mr. Ransom: He is eighty years old or something like that.

The Witness: He is a very elderly man.

The Master: Does he attend to business now?

The Witness: Yes.

The Master: Regularly?

The Witness: Yes, he comes down to the office regularly every day.

The Master: I do not care how old he is if he comes to business regularly.

Mr. Ransom: He does not, your Honor.

The Master: Mr. Woods just told me, in spite of what you just said, that he attends the office regularly every day.

Mr. Ransom: Mr. Woods also testified that he was away from the office eight months in 1918. 15248

The Master: That does not prove that Mr. Bradley is not available now.

Mr. O'Brien: He is a contemporary of Mr. Edgerton's here. Mr. Edgerton can work fifteen hours a day and be in court every day.

Q. Does Mr. Bradley draw a salary now, and did he in 1918?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Have you seen him there regularly every day during the past year and a half?

The Master: Objection sustained. I brought that out myself. 15249

Q. He is chief engineer, is he?

Mr. Ransom: I object to that question.

The Master: Objection sustained. That has been answered a dozen times. I only sustain these objections, Mr. O'Brien, to limit the cross-examination, because the matters have been fully covered.

Q. Why do you say, Mr. Woods, that the paper which refreshes your memory does not change your view?

Mr. Ransom: He did not say that it refreshed his memory. I object to the question.

5083

The Master: Then answer the part that does say what you said.

Q. Did the record that I handed you refresh your memory?

The Master: You, see, it is perfectly unimportant whether Mr. O'Brien's question was accurate or not. The point of it is that he said he did not change his view. Why did it not change your view?

The Witness: There is nothing there that I read that required me to change my view in any

15251 way.

Q. Was Mr. Bradley's statement correct?

Mr. Ransom: I object to the question. He should not be obliged to comment on the testimony of some other witness in some other case.

The Master: Objection sustained.

Q. Do you differ from Mr. Bradley's view?

The Master: Objection sustained. The witness has said that there is nothing that he read in the testimony of Mr. Bradley to change his testimony.

Mr. O'Brien: Exception.

The Master: I am not going to let you get in

15252 what Mr. Bradley testified to, whether he testified to something else or not.

Mr. O'Brien: Well, I would like to have them meet that situation. It merely saves time, bringing Mr. Bradley down here.

The Master: I can't allow it, that is all. I have got to sustain the objection, because it is not proper cross-examination. It is not the way to get Mr. Bradley's testimony in.

Q. Did you talk with Mr. Bradley much on this subject?

A. Oh, many times.

Q. During the conferences or conversations how did he express himself?

Mr. Ransom: I object to the question as already covered. The present form of the question is indefinite and fixes no time and is vague and meaningless. "How did he express himself," probably by words rather than by signs and symbols.

The Master: I will sustain it upon the ground that the subject is covered. Mr. Woods' testimony originally was that the building of water gas plants was a matter under discussion and consideration. The next day when he appeared on the stand he was more definite, and said that it was shown on drawings and charts. You can't bring any more out than that. 15354

Mr. O'Brien: There will be a procession of witnesses, then, when we come to get our subpoenas out.

Mr. Ransom: If you will go over to the Astoria you will see the chart hanging on the wall.

Mr. O'Brien: If we had a chart of Mr. Bradley's mind here, that would be better.

Q. How much oil did you use per thousand cubic feet of coal gas from 1906 to 1912? 15255

A. I cannot tell you that offhand, Mr. O'Brien.

Q. Have you any data with you that would help your memory?

A. I have not.

Q. Didn't you expect to talk about the various capacities, elements that entered into the manufacture of gas in this plant, when you came to testify?

A. To some extent, naturally, yes.

Q. And would not this appeal to you as a subject that might be gone over on direct or cross-examination?

15256 George E. Woods, Cross.

A. It did not, or I would have had it.

Q. Did counsel tell you what papers to bring and what not to bring?

A. He did not.

Q. Did he give you any instructions as to the questions that you were to evade?

A. He did not.

Q. Now, can you, without giving the total gallons of oil that were used during those years at Astoria, can you give us approximately the average quantity per thousand cubic feet of gas made?

15257 The Master: As I understand it, Mr. O'Brien, the gas that was made in Astoria from 1906 to 1912, was coal gas.

Mr. O'Brien: Yes.

The Master: That coal gas was enriched over at Ravenswood.

Mr. O'Brien: Well, that is true, too. However, I have been asking the witness and he is simply still a blank on it, he says he don't remember, he could not tell it.

The Witness: There was an enrichment at Ravenswoods, for which we were charged a certain amount of oil.

15258 The Master: Mr. O'Brien's question is how much oil did you use at Astoria for the enrichment of your coal gas from 1906 to 1912?

The Witness: Not any.

Q. What quantity of oil were you charged for by the New Amsterdam plant during the period that you were making only coal gas at Astoria?

A. I do not recall the figures. I should say that it would be about what we are using now. The exact figures I do not know.

Q. You mean the total amount, or the amount per thousand cubic feet?

A. The amount per thousand cubic feet.

By the Master:

Q. You think it would range between 1.55 and 1.60 or 1.70?

A. 1.45 to 1.65.

Q. You think 1.45 was the low mark and 1.65 the high mark?

A. Probably. I have not the figures, and I have not looked at them in a long time.

Q. That is your best judgment?

A. That is my best judgment.

By Mr. O'Brien: 15260

Q. Have you anything here among all your data that will give us definitely?

The Master: He said he had not.

Q. Did you prepare or were you asked to prepare by Mr. Carter or by counsel for the complainant, or the attorneys for the complainant to prepare any statement showing the amounts of gas oil used by the New Amsterdam plant to enrich the coal gas produced at Astoria from 1906 to 1912, on the basis of cents per thousand cubic feet.

Mr. Ransom: I object to the question. I endeavored to have this witness testify to the actual figures with respect to particular companies, 15261
and Mr. O'Brien so vociferously objected that your Honor sustained the objection and he was not permitted so to testify. If it is desired to have this witness—

Mr. O'Brien: Point out the page in the record to which you refer in that statement.

The Master: Now, Mr. O'Brien—go and finish your statement, Judge Ransom.

Mr. Ransom: This witness's testimony was opinion testimony, and he has not been asked to give what I would be very glad to have him

15262 George E. Woods, Cross.

give, namely, the actual figures as of different plants in this respect.

The Master: The objection is overruled. The question is a proper one on cross-examination though it were not proper on direct-examination. Now, if you know, Mr. Woods, I should be very glad to have you tell us what the exact amount was that was used by the New Amsterdam Company during these years for the enrichment of the Astoria coal gas?

The Witness: I do not know the exact amount.

15263 The Master: Can you get those figures?

The Witness: I can.

The Master: Mr. O'Brien asked you, I think, whether you were asked to prepare any statement showing that?

The Witness: I was not.

The Master: Now, Mr. O'Brien, do you want that information?

Mr. O'Brien: Well, your Honor, of course if it was being offered on the direct, and was not properly proven I would object to it.

The Master: You are asking now for some information on cross-examination.

15264 Mr. O'Brien: I am asking for some information. The purpose of the question—

The Master: Wait a minute. I am not trying to put anything over on you, Mr. O'Brien. I am going to limit your examination, however, if you say to me that you do not want it. If you say you do want this proof I am going to direct the witness to get it, and I am going to hold his cross-examination over until he gets it. If you say you do not want it, I will stop the cross-examination.

Mr. O'Brien: As we go along, of course I am

going to avail myself for the purposes of cross-examination, of such books as have been offered in evidence and the supporting data, and when I do that I take them as admissions against interest, and I do not want to put myself in the position of proving affirmatively how much they have used at the New Amsterdam plant.

The Master: But you are doing it if you cross-examine this witness and he has the data. I want to know whether you are wasting time, or whether you really want the information. If you really want the information I am going to 15266 get it for you.

Mr. O'Brien: Your Honor, I am going into that question—

The Master: Next question.

Mr. O'Brien: I am going into the question of the cost of making gas at Astoria.

The Master: Next question.

Mr. O'Brien: On this particular matter I want to find out from the witness the actual amount of oil used. I want him to testify on this cross-examination as to the actual amount of oil used from the time they started the Astoria plant up to the time that they switched the system and 15267 brought in the water gas system.

The Master: Ask your next question, will you?

Q. The nearest approach that you can give to that would be from 1.45 to 1.65?

The Master: Objection sustained.

Mr. O'Brien: That was preliminary to the next question.

Q. Mr. Woods, how would that average vary?

Mr. Ransom: Objected to as not cross-examination.

The Master: Objection sustained.

Q. Would you say that 1.45 for three months of the summer time and the rest 1.65?

Mr. Ransom: Objected to on the same grounds.

15268 George E. Woods, Cross.

The Master: Objection sustained.

Q. You have before you the figure, the amount of money that the complainant claims was paid by the Astoria Company to the New Amsterdam Company for the enriching of the coal gas at Ravenswood, have you not?

The Master: For a certain period.

A. For a certain period, yes.

Q. For what period?

A. For 1918 and 1919.

Q. Have you the same information for 1917, 1916,
15269 1915, 1914, 1913 and back to 1906?

A. I have not.

By the Master:

Q. Can you get it?

A. It can be gotten, yes.

Q. If the Master so directs will you get it and be here tomorrow morning with it?

A. I think it can all be gotten out by tomorrow.

Q. If it is physically possible to do it you will have it here by tomorrow morning?

A. Yes, sir.

By Mr. O'Brien:

Q. And the basis of compensation did not differ
15270 in any detail, did it, in the period 1906 to 1912, from the period 1912 on to date?

The Master: You mean the basis of computation?

Mr. O'Brien: Yes, to New Amsterdam for the enriching.

The Master: The basis was the extra oil used?

A. Yes, I understand. I am just trying to think, your Honor, if there had been a change at any time. I think it was the same then as it is now.

Q. Well, was there any formula used in connection with that computation?

A. Yes.

Q. What was the formula?

Mr. Ransom: I object to the question. It has been gone over twice.

The Master: It is allowed.

A. It was based upon the—I tried to explain that the other day, I don't know whether I was clear or not, that we made a certain amount of water gas of a certain candle power going—

The Master: Coal gas, you mean?

The Witness: No, of water gas of a certain candle power going into the holder. It might 15272
have been—

Q. At New Amsterdam?

A. At New Amsterdam—27, 28 or 29 candle power and mixing with that gas the coal gas from Astoria.

The Master: At a certain candle power?

The Witness: At a certain candle power.

Q. Measured how, tested how?

The Master: Oh, we have been all through that. Objection sustained. The other has been fully covered, but I will let him state it again.

A. The outlet candle power was ascertained and the difference between the outlet candle power and the inlet candle power was the amount of candle power 15273
that the water gas plant had to make in order to enrich the coal gas, and the amount of oil required in the water gas plant to bring the candle power up from the outlet to the inlet was charged to the coal gas.

Q. I see. So that you really measured the *quantum* of oil that they were to pay for by the measure—you measured that in candles?

A. Based upon the candle per gallon efficiency, and then—for instance, if we had—

Q. What do you mean, what do you say, candle what?

15274 George E. Woods, Cross.

A. Candle per gallon of efficiency of the oil used.

The Master: Candle per gallon of efficiency of the oil used.

Q. I see.

A. Here is a proposition: If we were making ten million cubic feet and had had a six candle per gallon efficiency, on 24 candles we would have used four gallons in the water gas. If we made thirty candles we would have used five gallons to make the water gas. That one extra gallon which was used in water gas production was charged to coal gas enriching.

15275 By the Master:

Q. Let me ask you this, Mr. Woods. I meant to ask you before. Does air pressure play any part on the quantity of gas metered, or as to the candle power?

A. Absolutely not. Air pressure?

Q. Yes.

A. You mean the pressure of the atmosphere?

Q. The air pumped into the gas, or pumped into the mains?

A. We don't try to get any air into the pipes, your Honor; we try to keep it out.

Q. Well, I was wondering whether the meters were

15276 affected in any way by air pressure or the pressure of the gas other than ordinary gas; whether there is any element that could possibly get into it to change the amount or reduce the amount?

A. The quantity, you mean the volume.

Q. Yes.

A. No, there would be no way of getting air into it; practically all under pressure.

By Mr. O'Brien:

Q. Well, you make corrections in your tests for candle power corrections for temperature as well as pressure?

A. Yes. That is barometric pressure. There is a standard method for doing that. In other words, in your determination of candle power your corrections are made for 60 degrees of temperature and a 30-inch barometer. That is called a standard method. In other words, you use five cubic feet at a 60 degree temperature.

By the Master:

Q. I was looking through one of these manufacturing books the other day, and I found a reference to the amount of make and then an adjustment of the amount of make. What does that mean? 15278

A. It means, your Honor, that in order to establish a uniformity—for instance, in the purification of gas you get infinitely better results by having the temperature run from 75, 80, 85 and 90. When it gets—when the temperature is down the chemical reaction of the purifier is not so good, and it requires more labor in the handling of material. Now, unless we established a uniform degree of temperature, your result would be almost anything. For instance, for every four degrees change in temperature it affects the volume one per cent. In other words, if we had a—if we recorded at the meter at 64 degrees temperature, we would have to take up one per cent, because 15279 at 60 degrees, which would be the standard, we would have one per cent less gas than when registered at 64 degrees. Another reason for correction at 60 degrees is that it is assumed and believed under normal conditions that the temperature of the ground at which the pipes are laid is at or about 60 degrees. Now, if we can correct by temperature at the works to 60 degrees we will get some line then as to what the unaccounted for gas might be. If we should go ahead and record our gas, which in some cases runs to 85 or 90 degrees without making a correction, instead

of having a six or six and a half or seven per cent unaccounted for, we would run to twelve or fourteen per cent. You see, in many instances we record as high as 90 degrees temperature.

Q. Why wouldn't that be a more accurate record?

A. It would not be an accurate record at all, your Honor, because you could not get any kind of result if you did not make corrections for temperature. If we should register the gas at 90 degrees, which would be 30 degrees beyond the standard, we would have an unaccounted for gas of seven per cent as a
15281 result of that alone.

Q. Well, why wouldn't that be better than making an arbitrary adjustment for correction?

A. Because we would have no standard or anything. One plant might run at 90, and one at 75. As a matter of comparison, you would not know what any one was doing until you compared it in that same standard.

By Mr. O'Brien:

Q. Well, you do make corrections for temperature, and that is what corrected make means when it appears in the manufacturing books of the several stations?

15282 A. Absolutely.

By the Master:

Q. Am I right in the impression that I have, that the amount of gas actually made is only approximated by your meter reports?

A. No, the actual amount that is made, your Honor, if we should cool down our gas to 60 degrees, and it was registered at 60 degrees, there would be no correction whatever. That is the standard which is employed at every place. Unless you knew those corrections were made, you could not make any comparison between any companies or any plants.

Q. All of those adjustments are adjusted back to 60 degrees, is that it?

A. The standard of 60 degrees. There we get the recorded make as indicated by the meter, the temperature is taken every hour, we find the total make for the day and have the temperature at which that was recorded, and you make the correction back to 60 degrees.

Q. It is always down, isn't it?

A. Usually down, although I have known cases where it was up.

Q. That is rare, isn't it? 15284

A. Yes, because we try to keep it up, our results are better in purification, etc., with a higher temperature.

By Mr. O'Brien:

Q. Well, then, what your manufacturing book means when it sets forth in one column the registered make and the next column the corrected make, is that you express in the corrected make the registered make?

The Master: In terms of 60 degrees?

Q. In terms of 60 degrees?

A. That is right.

Q. You just find out how much gas that same reg- 15285
istered make would mean in volume if it were at 60 degrees?

A. That is right.

Q. You make an allowance for that in these figures?

A. That is right.

By the Master:

Q. And your testimony is that that corrected make is a more true, a more accurate statement of the gas actually made and put into the holders and ready for distribution than the amount figured at the higher temperature?

A. Oh, absolutely.

15286 George E. Woods, Cross.

By Mr. O'Brien:

Q. And in that way you bring it into accord with the consumers' meters?

A. You bring it more nearly into accord. It is a standard practice throughout. You could not attempt to compare with any other condition. We have to have these standard conditions as a matter of comparison. Let us assume, for the sake of argument, if a company or plant or anybody else was permitted to do that, you kept no account of your temperature at which your gas is registered, we might register 75,
15287 80 or 85, and if you did not know what that temperature was and you had a large unaccounted for, you would not know whether it was the result of the plant or the result of your street mains, you would have absolutely no means of ascertaining.

The Master: Is this a standard which your company has adopted, or is it a generally universal standard?

The Witness: It is a standard throughout the world, your Honor.

Q. Have you got your formula for the reduction here?

A. No, I haven't the formula, but it is about one
15288 per cent for every four degrees.

Q. Well, now, see if I have gotten that clear about the method by which the compensation is determined.

The Master: I won't allow any more questions on that, Mr. O'Brien. It is perfectly clear to me and I think it is on the record. Next line.

Q. Well, do you recall just how many candles you attributed to a gallon of oil under that basis of compensation?

Mr. Ransom: Objected to.

The Master: For what period?

Q. Talking about actual candles.

The Master: What time?

Q. 1906 to 1912?

A. Referring to Astoria or Ravenswood, or what is the question?

The Master: Ravenswood.

A. I do not.

Q. Talking about now this compensation paid by Astoria to New Amsterdam for the enriching, it was measured in terms of candles, wasn't it?

A. It was measured—

Q. Candles per gallon efficiency?

A. Yes. The calculation was based on candles per 15290
gallon efficiency. It might have been anywhere from 5.90 to 6.20 or 6.30, depending upon the time of the year, the efficiency. I do not recall, but there wasn't variation from five to eight per cent at times.

Q. Under that same principle what candle power would you get out of one gallon per thousand cubic feet?

A. Out of one gallon?

Q. Yes.

A. In water gas?

Q. Yes.

A. You might get anywhere from 5.8 to 6.25 candles out of one gallon. 15291

Q. You would really get that out of the first gallon?

A. Well, it is a question whether you would or not. I am not sure, because we have never been down to one gallon. There have been times when—

Q. Well how about two gallons?

A. Well, I think the results would be practically the same.

Q. You could get that much efficiency out of two gallons?

A. I think so. We have never been down before to two gallons.

15292 George E. Woods, Cross.

Q. Well, how far have you been down?

A. To three and one half.

Q. Well, what efficiency would you get in candle power out of three and one half gallons?

A. You would get the same.

Q. What would it be? Give me the range now?

The Master: About six?

The Witness: It would be 5.75 to 6.25

The Master: That is an average?

The Witness: I should say so, yes.

The Master: So three and one half gallons

15293 would be about 22 candle power.

The Witness: Three and one half at six would give you 21 candles at the station.

The Master: And that would be about 20 out on the service?

The Witness: It would depend on the time of the year, your Honor.

Q. Well, you can get 22 frequently out of three and one half, can't you?

A. I never have.

Q. Did you ever see the records of your company?

A. Oh, yes. There might have been times. I have seen times—

15294 Q. Wouldn't you get it out of 3.65?

A. At times.

Q. Right along in the winter time?

A. We have gotten some good results.

Q. Wouldn't you get it in the winter time?

Mr. Ransom: Which plant?

The Master: I don't care which plant.

Mr. Hayward: If the Master please, while he is looking that up, I had an actual appointment in Judge Chatfield's court at 10:30, and it is now after 10, and I suppose Mr. O'Brien will go the rest of the forenoon, I do not think I will be there more than an hour.

The Master: If you wait until Mr. O'Brien is through you will probably be here the rest of the winter.

Mr. Hayward: Well, I want to cross-examine this witness very shortly. It probably won't take more than an hour.

The Master: If Mr. O'Brien gets through before you get back I will hold it until you arrive.

Mr. Hayward: Thank you.

Q. At what season of the year, then, would you put the greatest efficiency for candles, in the summer time?

15296

A. Well, usually in the summer time, yes. There might be some conditions when it might be in the winter time, but take it as a whole, you are using more oil in the summer.

Q. Take it in the summer time, would you not get 22 candles out of 3.65 or 3.75?

A. Yes, we have.

Q. And 3.80?

A. We have.

Q. During all the summer months?

A. We have.

Mr. Ransom: I object to the questions as vague. They do not fix the place where this was done. 15297

The Master: It does not make any difference. Mr. O'Brien is trying to develop the point that you can get the 22 candle power at 3.65 or 3.75 or 3.80.

Mr. Ransom: But he has not fixed the place.

The Master: I do not care about that.

Mr. Ransom: 22 candle power in a particular plant at a particular time does not establish anything.

The Master: I know that, but the fact remains

that they do get and have gotten generally during the summer and sometimes during the winter 22 candle power out of 3.65 or 3.80. Is that right?

The Witness: That is right.

The Master: That is covered now.

Mr. O'Brien: Well, as long as he says that I will not go any further on that.

Q. If you have any doubt about it I will refresh your memory now. I hand you the manufacturing book of the 99th Street station, so that if you care

15299 to change your opinion in any way—

The Master: No, he does not. He says there is no question about that.

Q. If you keep on adding oil, going above four gallons, will that proportion of efficiency, candle power per gallon efficiency, increase in the same proportions?

The Master: The proportion will be maintained will it not?

The Witness: It will be maintained until you get up around five gallons, your Honor, then your efficiency starts to drop off.

Q. Then what happens?

A. Then your efficiency starts to drop off after five

15300 gallons.

Q. You mean if you put in six gallons you would not get six times six in candle power efficiency?

A. That is right. In other words, you are limited after you get up there, from 29 to 31 candle power—

The Master: That is, that will make about five gallons?

The Witness: That will make about five gallons.

The Master: After you get beyond that you do not get six gallons?

The Witness: No, then you are wasting your

oil and not getting any great results, or to any extent.

Q. Just about at what point does it begin to fall off? Where would you say the maximum is, the maximum of efficiency?

A. It would depend somewhat on the character of the oil and conditions but anywhere between 29 and 31 candle power; beyond that point—

Q. (Interposing.) How much?

A. Between 29 and 31 candle power.

The Master: Is the peak?

The Witness: Is the peak, after which your 15302
efficiency starts to drop off.

The Master: Under average conditions, taking the in and out, good and bad, cold and warm, and all the rest of it?

The Witness: That is right. Beyond that candle power, your Honor, your efficiency drops off then quite rapidly. In other words, we might put in ten gallons instead of five, and our candle power might be 35 or 36, your Honor. I question whether we would get that.

The Master: That would make a very smoky gas, too, would it not?

The Witness: Yes. It could be done and done 15303
efficiently, there might be times when we would be glad to do that, but it is not a practical operation.

Q. Is it not a fact that the more candle power you have in your gas, the longer a given quantity of gas will last, say for illuminating gas?

A. The longer it will last?

Q. Yes.

The Master: What do you mean?

Q. Could you get more use, say, out of 1,000 cubic feet of gas that has 30 candle, than you could out of fifteen?

15304 George E. Woods, Cross.

A. If you used it on a Welsbach burner the result would be the same.

Q. What?

A. If you were using it on a Welsbach the result would be the same, there would be practically no difference on a Welsbach burner.

Q. You mean you could not burn it longer and get more out of it?

A. No.

Q. I am talking about the consumer, not the company, now.

15305 A. I know. You would convert that into a blue flame. The difference between 24 and 22 gas would be that it would have a higher B. T. U. value, but the flame temperature would be approximately the same —might be a little bit higher, and your result, as far as light is concerned, from a Welsbach mantle would not be any different.

The Master: And the gas would burn up just as fast?

The Witness: Just as fast, your Honor.

Q. That would be your idea?

A. That would be my idea on that.

Q. Have you made any investigations along that

15306 line?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Mr. O'Brien: This is very important, your Honor.

The Master: I don't think so.

Mr. O'Brien: It may not appear to you now, but it is, your Honor.

The Master: That is covered.

Mr. O'Brien: I want the witness to state how far his investigations in that matter went.

Q. Have you made any experiments on increased candle power?

The Master: Show me how this is important before I permit another question. Do not answer that one.

Mr. Ransom: Important in this case.

The Master: Of course, in this case; I am not interested in some other case.

Mr. O'Brien: The question involved here in the use of oil, the question of marketing oil, and this particular matter I want to find out. He has expressed an opinion now that I think is contrary to the opinion of others, and I want to find out before leaving the subject whether or not he is 15308 giving us an offhand opinion or whether they have made in the actual work of the company—

The Master: Before I let him answer it I want to have clear in my mind how this particular point that you are now discussing is of any value in this case.

Mr. Ransom: The Legislature unfortunately fixes the candle power standard.

The Master: How is it important, Mr. O'Brien?

Mr. O'Brien: The question before us now is how far he has made his experiments. He has expressed himself on the efficiency of candle 15309 power. It is a great deal different, and I am going to find out whether he has actually made an experiment on which he bases his opinion.

The Master: That is whether you get six candle power out of a gallon?

Mr. O'Brien: Yes, when the maximum efficiency is reached.

The Master: How is that a point now as to where the maximum point of efficiency is?

Mr. O'Brien: The question I have got in mind—

The Master: I do not think it has any application here; the objection is sustained.

Mr. O'Brien: Your Honor, I am not asking about Welsbach burners. I am asking now, before I close the subject, how far he has experimented in finding out—

The Master: In arriving at the peak?

Mr. O'Brien: Yes.

The Master: I will let you ask that question. I am going to let Mr. O'Brien ask that question, Mr. Woods. You have said that the maximum

15311 candle power efficiency is between 29 and 31?

The Witness: On a carbureted water gas system yes.

The Master: On what is that based—actual tests?

The Witness: Absolutely, actual operation.

Q. Where?

A. Why, we have tried it out at many of our plants. We are trying to get candle power.

Q. You mean at a laboratory?

A. No, not a laboratory, in actual operation.

Q. Have you got the results of such tests?

A. Have I the results?

15312 Q. Yes: I mean was there a report made on it?

A. Oh, absolutely. We tried to get the candle power to see what we could get in actual operation.

Q. Where are those reports?

A. I do not know; we have had them at the plants; we have been up to five gallon, 4.85, 4.95.

Q. If you have done it the actual work of the company it will be expressed in your manufacturing books? At what stations?

A. I do not know. We have tried it many times, and we have had our oil up to 5.10, 5.15, 5.25, and when you get up above five gallons the efficiency starts to go down.

Q. We have the manufacturing books running back a great many years, of the 99th Street and the 21st Street stations

A. You probably would not find them there, because we would not be making that candle power, unless we were enriching coal gas.

The Master: The objection is sustained as to any further questions along this line.

Mr. Ransom: It is quite immaterial.

Q. In regard to water gas that is being used today, what candle power do you put in there to enrich the coal gas? 15314

The Master: I do not quite get the question.

Mr. O'Brien: I mean oil.

Mr. Ransom: Mr. O'Brien's questions are so vague.

A. I covered that all, Mr. O'Brien.

Q. Never mind; say it again.

Mr. Ransom: I object to the question.

The Master: I do not understand the question, and I will not permit any answer until I understand the question. Let us hear it again.

(The stenographer repeated the question, as follows):

Q. In regard to water gas that is being used today what candle power do you put in it to enrich the coal gas?" 15315

Mr. Ransom: I object to the question as vague and indefinite.

Mr. O'Brien: I will express it another way.

Q. Of what candle power is the water gas that you are using at Astoria to enrich the coal gas?

A. 25 to 26 candles.

Q. Does it vary much from that, if at all?

A. Oh, yes, there is a variation. It may be from 24 1/2 to 27, depending on the quantity we are making.

Q. That is the enriching gas you are speaking about?

A. Yes.

Q. Is there any water gas produced at Astoria that is not used for enriching purposes?

A. No, they all go into the same holder.

Q. All goes into the same pot?

A. Yes.

Q. Then we may safely assume that all of the water gas produced at Astoria is used for enriching of the coal gas?

15317 A. All the gas that we make at Astoria goes into the—into the—

The Master: Is mixed with coal gas?

The Witness: Is mixed with coal gas, yes.

Q. At Ravenswood you had a special gas to do that, did you, you did not turn all your production—

Mr. Ransom: Objected to.

The Master: Objection sustained as already covered.

Mr. O'Brien: Exception.

Q. At Ravenswood at the present time you use a special gas for enriching purposes?

Mr. Ransom: Objected to as already covered.

15318 The Master: Objection sustained.

Q. Have you other water gas produced at Ravenswood that is not used for enriching purposes?

The Master: Objection sustained.

Mr. O'Brien: Your Honor, this is important.

The Master: It is covered.

Mr. O'Brien: I don't know that it is.

The Master: I rule that it is covered.

Q. Before I leave the subject that I have just been on, Mr. Woods, I want to ask you whether you have any data with you that would enable you to tell us the quantity of oil that has been used by the Astoria

plant and paid by it, so far as the coal gas that is enriched at the New Amsterdam plant from 1912 to date is concerned?

A. I have not.

Q. Have you been asked to produce the figures per year covering the actual price paid for oil?

A. I have not.

Q. So that I cannot find out from you now on the witness stand the total amount of oil used by the Astoria plant in its own plant, and as to the New Amsterdam plant and paid for by the Astoria Company for the enriching of coal gas done there? 15320

A. I can give you those as of 1918 and 1919.

The Master: But not from 1912 on?

The Witness: No.

Q. You cannot tell in terms of dollars the difference in the oil expense of the Astoria Company as for the period 1906 to 1912, and from 1912 down to date?

A. No, I haven't that information.

Q. That would run up into millions of dollars, would it not?

A. It would be some considerable amount.

Q. Would you be able to say from your knowledge, your knowledge of the prices of oil?

A. The amount would be quite considerable to enrich the gas in compliance with the law to make 22 candle power we had to use considerable quantities of oil. 15321

Q. It would run up into millions?

Mr. Ransom: I object to the question as indefinite. What would run up?

Q. The cost of the oil.

The Master: I will sustain the objection for grounds other than those stated by Judge Ransom. It is covered sufficiently.

Mr. O'Brien: It has not been covered—

15322 George E. Woods, Cross.

The Master: The general subject has been covered, and this witness says he hasn't any figures, and he says it is considerable. How many millions I don't care.

Q. Did you expect to testify on these things that I have asked you about?

Mr. Ransom: That is objected to.

The Master: Objection sustained.

Mr. Ransom: If Mr. O'Brien will say that he wants this information it will be procured.

Mr. O'Brien: I want to call attention to two
15323 or three statements made by counsel. When he presented the witness he was presenting him on everything. Subsequently he narrowed his testimony, and now to-day he bases one of his objections on the assertion that this witness has only given opinion testimony.

The Master: I will sustain the objection upon the ground that the witness has answered that it amounts to a lot of money, he hasn't got the figures, and I will not allow you to ask him whether it is two million or three million.

Mr. Ransom: I have tried to have him prove detail figures, and the objection was sustained.

15324 The Master: I am trying to get Judge Ransom not to make speaches when they are not called for.

Mr. Ransom: I want this record straight.

The Master: The record doesn't mean anything, and speeches don't mean anything.

Mr. Ransom: The figures will be procured if they are desired.

Q. Mr. Woods, you gave us the holders of the several companies affiliated with the complainant company. I am going to ask you to give the capacity of these holders.

The Master: He has given that.

Mr. O'Brien: No, he has not.

The Master: Why, it amounted to forty-five millions, or thereabouts.

Mr. O'Brien: That is the complainant company.

The Master: That is right. I will allow it, go ahead what is the purpose of getting that?

Mr. O'Brien: Oh, it is a very important matter.

The Master: How is it important?

Mr. O'Brien: We have talked about the neces- 15326
sity of the Astoria plant. The affiliated companies are running their properties and supposed to be charging this company for transferred gas. It breaks into this question in many ways.

The Master: I don't think I am going to allow it.

Mr. O'Brien: Of course your Honor can shut it out if you want to, but one of its purposes is certainly apparent.

The Master: I do not see any useful purpose.

Mr. O'Brien: It goes not only to the question of the cost of gas—

The Master: How does it affect the question 15327
of the cost of gas?

Mr. O'Brien: Well, the New Amsterdam Company is charging, and the Standard Company, they are all selling gas to the complainant, and the complainant is paying them money for it.

The Master: Suppose they are getting it cheaper than they can make it for?

Mr. O'Brien: That short cut, or short circuit, will not prove this case, your Honor.

The Master: Is there a question on the record?

Mr. O'Brien: I am going to ask the witness

15328 George E. Woods, Cross.

the capacity of each of the affiliated companies.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I would like to have you reconsider that, for this reason—

The Master: No, unless you show me some real purpose in it.

Mr. O'Brien: One purpose is this: This complainant company built a plant at great expense, and is maintaining it at considerable expense, at Fordham Road and Kingsbridge Road—

Mr. Ransom: A plant?

15329 Mr. O'Brien: Sedgwick Avenue—a holder, if the Judge wants to be precise. They have tried to make some excuse for that in the testimony of the witness by stating that they needed it to feed Washington Heights. That element of expense is in this case. The question is as to who else is fed by that holder, the serving of gas to Westchester County; the price that is being paid for the gas; the necessity for this Company building mains to run up into the Bronx, and building that holder; the question of the capacity of the 132nd Street holder on the West Side; the ability if I may use the expression, of that holder to feed

15330 Washington Heights; the question of the need of a plant at 21st Street; the question of maintaining all of these plants in the face of the fact that they have got Astoria, engineer Bradley having testified in the other case that their purpose in transferring to Astoria was to move all the gas business over there.

Mr. Ransom: They still have not got enough plants.

Mr. O'Brien: All of these things come in here, and this question which I have put does not mean a long time spent on cross-examination necessarily, and bears directly upon the case.

The Master: I am not concerned about how much time a particular question takes. I want to see how a general line of questions bears upon the issue.

Mr. O'Brien: This witness has spoken about the necessity of reserve. They have been hinting right along some reason for keeping 21st Street, and some reason for keeping 99th Street.

Mr. Ransom: With all these plants the company has not got enough manufacturing capacity.

Mr. O'Brien: The witness testified yesterday, your Honor, as you will recall, that they pump a 15332
little gas down to New Amsterdam to keep them going. Now, our position will be that they do not need any of these plants, they did not need the plants of the affiliated companies, they do not need to buy gas from the affiliated companies, they could make their own gas and make it cheaper than they are making it today. All these things come up, and therefore the simple question of the holder capacity is certainly a proper one for me to ask.

Mr. Ransom: What has holder capacity got to do with the inadequacy of manufacturing capacity? This company now has not enough man- 15333
ufacturing capacity. As far as this reference to Westchester County goes there is not a shred of evidence in this case that indicates any supply of gas to Westchester County.

Mr. O'Brien: May I ask counsel why he brought it out on the direct?

The Master: I think I will modify my view to the extent of letting the witness give the holder capacities. Give us the holding capacities and we will see what develops.

Mr. Ransom: Exception.

15334 George E. Woods, Cross.

The Witness: The New York Mutual has a holder capacity of 14,000,000.

By Mr. Ransom:

Q. Where is that?

A. At the foot of East 12th Street.

Q. Holder capacity, did you give holder capacity or manufacturing capacity?

A. Holder capacity.

By the Master:

Q. We are talking now about holder capacity. Take them in the order that your testimony gave the
15335 location of the holders. The New York Mutual was the first?

A. Yes. The New Amsterdam Gas Company has a 5,000,000 foot holder at 15th Street.

Q. How about 58th Street?

A. At 58th Street they have I think about 3,800,000.

Q. And Long Island City?

A. At Long Island City they have 10,000,000.

Q. And the Standard?

A. They have one holder—

Q. At 115th Street?

A. 115th Street, of 400,000 capacity. At 63rd Street and Avenue A they have two holders of
15336 5,000,000 capacity each.

Q. The Central Union at East 137th Street?

A. The Central Union have about 8,600,000; I think that is the figure.

Q. 137th and 138th Street?

A. Yes.

Q. The Northern Union Company on Webster Avenue?

A. The Northern Union have 750,000 at Webster Avenue.

Q. And Westchester Creek?

A. I think—my best recollection is about 600,000 at Westchester Street.

The Master: Next question.

By Mr. O'Brien:

Q. You furnishing through the Central Union or the Northern Union, gas to the Westchester Lighting Company?

A. The Northern Union Gas Company are distributing some gas to the Westchester Lighting Company, yes.

Mr. Ransom: Within the city of New York, though.

Q. Does the Central Union distribute also some gas to the same Company? 15338

A. Not that I know of; I think not.

Q. How much gas is distributed to the Westchester Lighting Company by the Northern Union Company?

A. I do not know; I would not undertake to say, Mr. O'Brien. It is a matter of record.

Q. This matter is involved, is it not, in the manufacturing capacity, on the question of the manufacturing capacity of complainant?

A. We know what their requirements are, and any figures that I may have had as to their requirements, included the Westchester requirements, but were not segregated

Q. Where you speak of the requirements of the 15339
Northern Union, it includes the Westchester Lighting all the time?

A. I think I have seen a figure—

Q. You have not brought any data with you on that subject?

A. No. I think I have seen a figure within the last year, now that I recall it, for the sales to the Westchester Company, about 90,000,000 feet for the year.

Q. The Westchester Lighting does not make any by itself?

A. Oh, yes, the particular part of the territory that

15340 George E. Woods, Cross.

they are supplying for the Westchester Lighting Company lies within the city of New York and must conform to 22 candle power. Westchester County itself is on a different basis. They are not on a candle power basis at all, but they are making a gas of 585 B. T. U's.

Q. Coal gas?

A. No, they are making water gas. They have a coal gas plant too.

The Master: In other words, the Westchester requirements are on a basis of B. T. U.?

15341 A. Yes, 585 B. T. U.

Q. How does that compare with 22 candle power?

A. The B. T. U.— 22 candle power would be somewhat higher, and for that reason we are supplying that part of the district, otherwise, for them to supply the gas, they would have to give higher than 585 B. T. U.

Q. So that the Westchester Company buys from the Northern Company the gas it uses for this territory that lies within the city of New York?

A. That is right.

By Mr. O'Brien:

Q. You are acquainted with all the mechanism of
15342 the holder at Fordham Road and Sedgwick Avenue?

A. I am familiar with the holder, yes.

Q. You know, do you, every place that gas is pumped to out of that place?

A. Yes, I should say so.

Q. And is any gas sent to Yonkers?

A. There has been on one or two occasions, I should say, probably three, where the Northern Union lines hook into the Yonkers lines, and where there was a breakdown, the lines were connected, where they have had a breakdown and asked to be helped out over a period of four or five or six hours, two or three times during the year 1918.

Q. Do you mean to state that outside of some special emergency there is not any practice made of sending gas to Yonkers?

A. Outside of an emergency I know of no other through the line that connects with the Yonkers line.

Q. Who gives directions to the men in charge of the holders at Kingsbridge?

A. The Kingsbridge holder is under the control of Mr. De Castro, at 99th Street.

Q. So, if I find up at the Kingsbridge holder there instructions as to the transfer of gas from the Kingsbridge holder to Yonkers, I can assume that they came 15344
from Mr. De Castro?

A. Probably. Mr. De Castro is in charge of that.

Q. Is this a matter outside of your knowledge, or do you speak with some positiveness about it, the sending of gas outside of the city from the Kingsbridge holder?

A. It would be within my knowledge, yes, Mr. O'Brien.

Q. You say you would know about that, and that you did speak with positiveness on the subject?

A. Yes; I would know about it. I would probably be asked something about it at the time, as to whether or not we should do it; whether we, for the particular 15345
moment were in position to give them a little gas to help them out.

Q. Well, do they ever give the Consolidated a little gas to help the Consolidated out?

A. No.

Q. You never called upon them?

A. Never.

Q. For any gas?

A. No.

Q. Well—

A. It would not be likely, Mr. O'Brien.

Q. Do you send any gas to Peekskill?

A. No.

Q. Or any other place in Westchester or Dutchess County?

A. Not that I know of. I should say not.

Q. New Rochelle?

A. No.

Q. Any of the other towns in Westchester County?

A. No.

Q. Positive about that?

A. I am quite positive, yes.

15347 Q. Does the Astoria send any up there?

A. Absolutely not.

Q. Does the New Amsterdam send any up there?

A. No.

Q. Does the Standard Company send any up there?

A. No.

Q. Is there a separate gas company at New Rochelle?

Mr. Ransom: I object as immaterial.

Q. Or is that part of the Westchester Lighting Company?

Mr. Ransom: Quite immaterial.

The Master: I will allow it.

15348 A. That is part of the Westchester Lighting Company.

Q. Calling your attention, Mr. Woods to Exhibit 282, I will ask you if the complainant company has any other mains of any kind, transit, distributing or any other mains in the Borough of Bronx, than the mains shown in red on Exhibit 282?

A. Yes, they have mains leased to the Central Union Gas Company, outside, that Mr. Brundage testified to.

Q. Leased mains?

A. Yes, sir.

Q. Where are they?

A. Well, they are— just what section they are in, I am not prepared to say. There are some distributing mains that were laid by the Consolidated back in 1900 or 1901, and were afterwards leased to the Central Union Gas Company for their use.

Q. Could you tell us what streets they are on?

A. No. I did not testify to them, and I could not tell you, Mr. O'Brien.

Q. Well, you have to know that, don't you, in determining the manufacture of gas?

A. No, not necessarily, because they are being used 15350
by the Central Union Gas Company. They have been in use by them for a great many years. I would not undertake to say what streets they are on.

Q. Are they large mains?

A. Yes, I think there are some twenties and eights and sixes. I have forgotten the exact amount.

Q. Why didn't you put them on this exhibit when you prepared it?

Mr. Ransom: I object to the question.

The Master: The question is allowed.

Mr. Ransom: But he was called as a witness only—

The Master: I know what his answer is, I 15351
think, and I will let the witness give it.

A. That exhibit was prepared in connection with the use of the joint facilities to which I was testifying, the figures of which I made up in connection with the use of those particular facilities, which refer to some particular mains and holders.

Q. Have you a diagram which shows the leased mains and these mains you speak of here?

A. Yes, leased to the Central Union.

Mr. Ransom: I object to the question. Mr. Brundage testified concerning those, giving a list of where they were.

15352 George E. Woods, Cross.

The Master: The question is allowed. Have you got a map showing the other mains?

The Witness: I have not.

The Master: Is there one in the office?

The Witness: I do not think there is a map of those particular mains, your Honor.

The Master: In the office?

The Witness: No. There is a record of the mains, as to where they are.

Q. Well, isn't there a map showing mains of which these are a part?

15353 A. There may be a map showing these mains, those particular mains; certainly there is a record and an indication or location as to the location of those particular mains.

Q. Well, do you mean to say positively that you don't know where they are?

A. Well, I know about where they are, Mr. O'Brien.

Q. Well, tell us about where they are?

Mr. Ransom: I object to the question as immaterial, it is not cross-examination.

The Master: I will allow it.

Mr. O'Brien: Your Honor will recall when Mr. Brundage was on the stand—

15354 The Master: I said I would allow it. The question is allowed.

Mr. Ransom: Exception.

A. I think some of the mains run from around 138th Street and Madison Avenue and run up I think east of Alexander Avenue, between 138th Street, north. That is my recollection as of this time. I haven't paid any particular attention to it.

Q. Why haven't you paid particular attention to that?

Mr. Ransom: I object to the question.

The Master: The question is allowed.

A. I did not think it was of any material importance. I knew that the mains were there and were being used by the Central Union Gas Company.

Q. Didn't you have to know what they were and where they were and what their capacity was, before you determine as an engineering proposition whether or not the complainant company should spend a lot of money to put in the mains in the Bronx shown on Exhibit 282?

Mr. Ransom: I object to this line of inquiry.

The Master: I will allow it.

Mr. Ransom: These are distributing mains, 15356
they are not used by the complainant company. Originally built by it, but not used by it.

The Master: I will allow it.

Mr. Ransom: Exception.

A. They had absolutely no bearing on the situation so far as these transfer lines were concerned.

Q. Why didn't they have any bearing on the situation so for as transfer lines were concerned?

Mr. Ransom: I object as immaterial.

The Master Allowed.

Mr. Ransom: Not cross-examination.

A. There were no particular mains that had a bearing on the transfer of gases. The important thing 15357
under consideration was the gas requirements.

Q. The gas requirements of both the complainant company and the Central Union Company?

A. Of all companies?

Q. Yes. Well, to know what the Central Union requirements were and how big a main you should build, the complainant company, and how much money they were warranted in spending in building these mains in the Bronx, wasn't it necessary to have before you and know the capacity of the existing mains in the Bronx?

15358 George E. Woods, Cross.

A. Absolutely not.

Q. Weren't you concerned with the question of the capacity of the mains which the Central Union had to distribute their own gas?

A. I was concerned in the amount of gas that the Central Union needed, insofar as getting them that supply. This is a transfer system and had absolutely no connection with the distribution system in any way. It was a question as to what their plant capacity was, and what their requirements might be in excess of their plant capacity, and how we were going to get
15359 gas to them. We knew what their send-out was and what their requirements were. The question was to provide facilities to give them sufficient gas to distribute into their mains. Their mains had no bearing on the situation whatever.

Q. Well, wasn't there a way—the Central Union plant was at 138th Street and East River?

A. Right.

Q. Their holders are there?

A. Right.

Q. If you wanted to sell them gas so that they could meet their requirements, you could send it directly to their plant, couldn't you?

15360 A. We had to know that they required it, in so far as pressure and so forth were concerned. We knew that they required gas in the upper section of their territory both of the Central and Northern Union Gas Company.

Q. The terminus of the Astoria tunnel is at Locust Avenue at 132nd Street?

A. Right.

Q. That is six blocks away from the plant of the Central Union Company?

A. Right.

Q. What obstacle was there to just sending the gas

from the terminus of the tunnel to the plant of the Central Union, and letting them take care of their own distribution?

A. They are taking care of their own distribution. They could not distribute all of their gas from their 138th Street plant.

Q. Why?

A. Well, because the northern section was growing so rapidly they required gas in that section, and it was with the view of taking care of the northern end of the Central Union district, feeding in to the southerly end of the Northern Union district, that the holder 15362
was put in that position; at the same time being a logical location for the use of the Consolidated Gas Company which required that they have storage facilities for the Consolidated Gas Company, and a combination of the two at that point provided facilities for both.

Q. Well, why couldn't the Central Union, taking the gas directly at 138th Street from the Astoria tunnel, take care of their territory?

A. It could. They could have built a holder and we could have built a holder and have had two valve houses instead of one and two plots of ground instead of one, and the result would have been the expenditure 15363
of 25 or 30 per cent more than we are spending now to perform the same work. That is the answer.

Q. What was their holder capacity at 138th Street at the time this main system as shown on Exhibit 282 was built?

A. I should say about 8,000,000, 8,600,000.

Q. And what is the land that they have at 138th Street?

A. What is the land?

Q. Yes.

A. They have land. I do not think they have any

15364 George E. Woods, Cross.

piece of land on which to build a five million foot holder at the present time.

Q. You know there is a lot of vacant land around East 138th Street?

A. There is land there, yes.

Q. You know there is a lot of vacant land around the terminus of the Astoria tunnel, do you not?

A. Yes.

Q. Land that has been in the market for years?

Mr. Ransom: I object to this line of inquiry. What possible materality or bearing on the issues

15365 can they have?

The Master: I will sustain the objection to the last question, as to land that has been in the market for years.

Q. Are you acquainted sufficiently with that territory to be able to say the amount of land—not in acres, but generally speaking, that is vacant there in the section of the terminus of the Astoria tunnel at 132nd Street?

Mr. Ransom: I object to the question.

The Master: I will allow it. Is there a lot of vacant land around there?

A. Yes, there is vacant land in that section.

15366 Q. Is there a lot of vacant land around there?

Mr. Ransom: Do you mean of this company, or what?

The Master: No, any vacant land. Is there a good deal of vacant land around there?

A. Yes, there is.

The Master: Considerable?

The Witness: Considerable.

Q. Where are the Northern Union's holders located?

A. They have one on Webster Avenue.

Q. And what street?

A. 170 some odd street. They have their offices

there. Then they have their others over in West Farms.

The Master: That is the one on Westchester Creek?

The Witness: Yes.

Q. And the Westchester Lighting Company; how near is the nearest holder of the Westchester Lighting Company?

Mr. Ransom: I object to that as immaterial.

The Master: Sustained.

Q. Give the exact location of the holders of the Westchester Lighting Company? 15368

Mr. Ransom: I object to it as immaterial.

The Master: Sustained.

Mr. O'Brien: I will make this part complete, your Honor.

The Master: No, I do not want it.

Mr. O'Brien: I do not want you to turn back over the pages of the record to find out where it was located.

Mr. Ransom: It is quite immaterial.

The Master: Objection sustained.

Q. These mains of the complainant that are leased to the Central Union Company were leased at the time that the main system shown on Exhibit 282, so far as the Bronx is concerned, was constructed? 15369

The Master: Objection sustained. That has been fully covered.

Mr. Ransom: Do not answer, Mr. Woods, until there is a ruling.

Mr. O'Brien: I just want to fix that date, your Honor.

The Master: No, I am going to stop that.

Q. Are there any other mains of the complainant company in the Borough of the Bronx besides those shown on Exhibit 282 and the leased mains that you have just described?

15370 George E. Woods, Cross.

The Master: Objection sustained. The question has been asked and answered fully.

Mr. O'Brien: When I asked before whether there were any others he said there were leased mains. It is not a complete answer. They were mains leased to the Central Union and I want to have that entirely complete, with a definite statement by the witness that there are not any other mains.

The Master: My ruling will stand. I say it has been sufficiently covered.

15371 Q. Are there any other mains running out of the terminus of the Astoria tunnel at 132nd Street and Locust Avenue besides the mains shown on Exhibit 282?

Mr. Ransom: Objected to as immaterial if it relates to the Consolidated Company.

The Master: I will let him answer that.

A. There is not.

Q. What necessity was there for building the main in Avenue A, First Avenue, Pleasant Avenue and on up to the terminus of the Astoria tunnel at 132nd Street and Locust Avenue?

The Master: That is from the Ravenswood

15372 tunnel, is it not?

Mr. O'Brien: Yes.

The Master: What was the necessity for that main?

Mr. O'Brien: In the face of the fact that the Astoria tunnel could supply all necessary gas itself at the terminus at 132nd Street and Locust Avenue?

Mr. Ransom: I object to the question as argumentative.

The Master: Objection sustained. It is assuming too much. If you limit your question to

the necessity of building that transfer main from the Ravenwood tunnel up I will let you ask him that.

Q. State what necessity there was for building the main from the terminus of the Ravenswood tunnel at 71st Street and East River northward, and then eastward to the terminus of the Astoria tunnel?

Mr. Ransom: I object to it as immaterial and not an issue in this case.

The Master: I will allow that.

A. For the purpose of getting the gas made at the Astoria plant into Manhattan Island without going 15374
through the Ravenswood tunnel. The Astoria tunnel was built for the purpose of providing additional facilities and at the same time as an insurance against accidents to the Ravenswood tunnel, in which case there would be no means of getting gas into Manhattan Island either from Ravenswood or the Astoria plant.

Q. The Ravenswood tunnel was built first?

A. Yes.

Q. And what year was that put in?

A. I should say about '92.

Q. Would there be any necessity, Mr Woods, of having that main run up from the Manhattan terminus of the East River tunnel if it did not send the gas down 15375
from Astoria to Ravenswood to be enriched?

A. That has not anything to do with the Ravenswood enrichment. The gas is enriched at Astoria to go through the Astoria tunnel.

By the Master:

Q. How is the gas transferred from Astoria to Ravenswood for enriching purposes?

A. Through the 60 and 48 inch lines.

Q. That run right through Long Island City to Astoria?

A. Yes, sir.

15376 George E. Woods, Cross.

Q. It does not come through the tunnel at all until it has been enriched?

A. That is right.

By Mr. O'Brien:

Q. If they did not send any down there to be enriched you would not have to have this main shown on Exhibit 282, running from the terminus of the Ravenswood tunnel northward to 132nd Street and Locust Avenue, would you?

A. Absolutely we would.

By the Master:

15377 Q. Why?

A. Why, the Ravenswood has no bearing on that at all. If we sent no gas to Ravenswood, all our gas would cross through the Astoria tunnel into the Bronx for delivery on Manhattan Island and would come down through this 48 inch line.

Q. Would there be any necessity for this line running from the Astoria terminus to the Ravenswood tunnel if the Ravenswood plant did not enrich the Astoria gas?

A. As a matter of the line between Astoria and Ravenswood, it was built a good many years before the Astoria tunnel was started, your Honor, and—

15378 Mr. O'Brien: You mean this line up First Avenue?

The Witness: No, your Honor refers to Long Island City mains, do you not?

Q. No, I am referring to this line up First Avenue.

A. Will you kindly repeat that question? I have got it wrong.

Q. Mr. O'Brien seems to make a point of the fact that the company wasted money building this line from 71st Street or 72nd Street up First Avenue.

A. Yes.

Q. He wants to know what possible reason there

was for it, what excuse there was for it, unless the Ravenswood plant enriched Astoria gas. Is it the fact that even though Ravenswood did not enrich Astoria gas the same reason would apply, for safety in having two tunnels to bring gas from Astoria and Ravenswood?

A. Right.

Q. It would still want to have that tunnel up First Avenue, would it?

A. Right.

Q. Whether it enriched the Astoria gas or not?

A. Yes, sir, and if anything should happen to either 15380
tunnel we could deliver gas either way.

Q. Whether the Ravenswood plant enriched the gas from the Astoria plant or not?

A. That would not make a particle of difference.

Q. That might be Ravenswood gas?

A. That might be Ravenswood gas, and if anything should happen to the Ravenswood tunnel, then that gas would travel through the Long Island City mains into the Astoria plant, through the Astoria tunnel and then go down to New York City through this 48-inch line.

Q. That would apply to Ravenswood, whether the gas was enriched or not? 15381

A. It would.

Mr. Ransom: It would also be a means of getting the gas into Manhattan even if there were not an Astoria tunnel.

By Mr. O'Brien:

Q. Where accidents might take place you have a reserve, have you not, in Manhattan itself?

A. Absolutely not. We would not have sufficient reserve now. You mean so far as plant is concerned?

Q. Yes.

The Master: The holder.

15382 George E. Woods, Cross.

The Witness: Well, the holder would not last more than from a half to three-quarters of a day, your Honor, if we have not sufficient plant capacity in the Astoria, and if anything should happen to these tunnels and the Astoria and New Amsterdam Company were out of business New York City would be out of business so far as light and heat were concerned.

Q. What accidents have you got in mind?

The Master: Objection sustained. That has been fully covered.

15383 Q. How many mains are there in the Astoria tunnel?

Mr. Ransom: I object to it as immaterial.

The Master: Objection sustained.

Mr. O'Brien: That was gone into, your Honor, when they built this plant.

The Master: I am sustaining it upon the ground that I think the general subject has been covered sufficiently. The witness has stated that they have these two tunnels as an insurance against accidents. Of course I can see where twenty or fifty or a hundred questions might be asked as to how many lines there are, how many tunnels there are, how many accidents there might be, whether one pipe would not serve another, and that sort of thing. The general subject is fully covered.

15384

Mr. O'Brien: That was all gone into when they built this tunnel. The question of the possibilities of accident was gone into. Was it not, Mr. Woods?

The Master: You can answer that.

The Witness: Yes, it was assumed there was a probability of something happening, and considering the work that we were performing as a public utility to assume that there was no liability of accident was almost criminal negligence.

Q. The number of mains in the Astoria tunnel was determined upon with that in view, was it not?

A. After the carrying capacity the tunnel was provided for any extensions or any increased business, etc. The mains were of sufficient size so that it would last for a considerable number of years, naturally.

Q. And you had more than one?

A. Yes, we have two and we have two in both tunnels.

Q. And there is a connecting railway over that part of the East River, is there not? 15386

The Master: Yes.

Q. Connecting Astoria and the Bronx?

The Master: Yes, there are a lot of other things there, I suppose. Objection sustained.

Q. If an earthquake happened here it would put all the gas companies out of business, wouldn't it, Mr. Woods?

Mr. Ransom: Objected to.

The Master: Objection sustained. I remember an earthquake in New York when I was a boy, that did not put any gas company out of business.

Mr. O'Brien: It was just a little shiver. 15387

The Master: It was quite a substantial earthquake, but it didn't put any gas company out of business.

Mr. Ransom: I call attention to the fact that the witness has given another necessity for that main.

The Master: Here is the trouble, Mr. O'Brien, when you talk about an earthquake; an earthquake might be a tremor which might shake some windows and throw some things off the wall; it

15388 George E. Woods, Cross.

might be strong enough to do more than that, or it might be an earthquake that might tumble the whole town. When you start to talk about earthquakes it lands you nowhere.

Mr. O'Brien: We will make our own deductions from the testimony of the witness.

The Master: You can make your own deductions, but you want to make your own earthquakes.

Q. What was the necessity of running that 48 inch main eastward from Lincoln Avenue to the terminus
15389 of the Astoria tunnel.

A. That was the connecting link in this transfer system.

Q. Why was that link put in, running it over to the terminus, why wasn't it continued right on up into the Bronx?

A. Because the other line was designed for carrying gas into the Kingsbridge holder, irrespective of this other line.

Mr. Ransom: The witness has said they had to get into Manhattan too. They don't want to send all the Astoria gas to Ravenswood.

Q. Go ahead, Mr. Woods.

15390 The Master: I think you answered it, didn't you?

The Witness: I did.

Q. You got through with that question?

A. I did.

Q. Is that your answer?

A. Yes.

Q. Then, expressed in other terms, it is that that main is used for shooting gas southward from the Astoria tunnel, as well as shooting it northward from the 71st Street tunnel?

A. The 134th Street line—absolutely.

Q. It goes north and south on the same days? How is that regulated?

A. It may go one way or the other, depending on the draft on the lines.

Q. How is that regulated?

A. Simply by the requirements at the various stations, as to what they want.

Q. Is it regulated at 111th Street?

A. No, not necessarily.

Q. Where is it regulated?

A. It is regulated at no particular place, except that they report that certain holders require gas, and 15392
they are told to pump on the line, and those holders that have sufficient gas are told to shut down or limit their pumping until the other holders get their requirements.

Q. How do you prevent the drawing on that main both ways, north and south, how is that regulated?

A. It would not make a particle of difference. You can draw both north and south, it might be going one way or the other; it would not make a particle of difference.

Q. At the same time?

A. Yes, it might go both ways. They may have a happy medium there simply where they join, like the 15393
tide.

Q. Do you mean to say you can have pumping engines sucking on that at both ends?

A. Absolutely, half a dozen points at one time.

Q. Where is it regulated?

A. It is regulated at the holder stations. They are told to take a certain amount of gas and get their holder requirements. If they need a lot they will pump rapidly, and if they don't need so much, it don't pump quite so hard, and somebody else will be taking it.

Q. Suppose at 42nd Street they start pumping, they

15394 George E. Woods, Cross.

telephone over to some place that they are using the transit main?

A. Yes.

Q. During that time other people stop work, do they, on the mains?

A. No.

The Master: Objection sustained, as fully covered.

Q. You say no?

A. Yes.

Q. Have you gone into the question of the require-

15395 ments of Washington Heights?

A. No more than I discussed it the other day, Mr. O'Brien.

Q. At the time the Kingsbridge holder was built, the upper end of Washington Heights was sparsely settled, was it not?

The Master: When was that; what year?

Mr. O'Brien: Well, I haven't in mind the year, but I assume about—

By the Master:

Q. Have you in mind when the Kingsbridge holder was built?

A. 1915, I think.

15396 Q. 1915?

A. Yes.

Q. The Kingsbridge holder?

A. Yes.

The Master: Then you don't mean that question, Mr. O'Brien?

Mr. O'Brien: The upper end of it was—

The Master: You don't mean that at all.

Mr. O'Brien: Well, it depends on what your Honor has in mind. I mean north of 181st Street.

Mr. Ransom: I object to the question. It is an imposition on this record—

The Master: Perhaps away up on Marble Hill somewhere, but Washington Heights was thickly populated in 1915.

Mr. Ransom: As much so as it is today, practically.

The Master: I will let the witness state whether Washington Heights was partially populated in 1915.

The Witness: I should say not.

The Master: It was thickly populated?

The Witness: Thickly populated.

Q. It was fed up to that time by 132nd Street, was 15398
it not?

A. It was, and were having difficulty in maintaining pressures on the district and maintaining a sufficient supply at 132nd Street. That was the consideration that caused the providing for a holder at the other end in order to help out the situation as it existed as of that time, and which we felt was going to get worse.

Q. And incidentally take care of the Central Union and Westchester County?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Q. Westchester Lighting? 15399

Mr. Ransom: There is just a little bit of territory—

The Master: I will allow that. Incidentally you were thinking of the requirements of the Central Union and Northern Union?

The Witness: That is right; in other words we felt there was economy in handling the situation as one, rather than making two bites of it.

Q. Why was there a difficulty about pressure on Washington Heights prior to 1915?

A. Inadequacy of supply for one thing—

Q. How was it expressed, what was the complaint?

A. I said we had difficulty in maintaining pressure, and also difficulty in maintaining the requred amount of gas at the 132nd Street holder.

Q. You mean on account of the higher level of the Heights than the 132nd Street holder?

A. No, the inadequacy of the supply.

Q. Was it the mains?

A. The mains to some extent had something to do with it.

15401 Q. Or the location of the holder?

A. It was not the location of the holder. Of course if you had mains two or three times the size you could have the holder there. In so far as capacity of the holder was concerned we were short on that district, the mains themselves required a long delivery, which required higher pressure to get the gas there, and we were having trouble with pressures and delivery, and the result of that was that they put in the Kingsbridge holder.

Q. Wasn't all that subject gone into when you located the 132nd Street holder in the valley over there by the river?

15402 Mr. Ransom: I object to the question. What is the bearing of it? That district developed rapidly—

The Master: I will allow it.

The Witness: Yes, and that 132nd Street holder is doing a great deal of work, and I suppose if we had put up three or four holders, and four or five mains at that time you would have criticized us for anticipating too many years ahead.

Q. When was the 132nd Street holder built?

A. I would not like to give you the exact date. I should think around 1906 or 1907.

The Master: Did Washington Heights develop very rapidly between 1906 or 1907 and 1915?

The Witness: I think there was quite a development there during that period. At least our requirements from 132nd Street were very largely increased.

Q. You built the 132nd Street holder, 132nd Street and the North River, at the time you were just starting the Astoria plant, didn't you?

A. That had no bearing on the Astoria plant.

Q. I am asking you the fact, never mind the bearing. I will draw my deductions? 15404

A. At or about that time, Mr. O'Brien, yes.

Q. Is there a Standard holder on the North River?

A. No.

Q. Where are the Standard holders located?

The Master: Objection sustained.

Mr. O'Brien: I want to put in the testimony right here, your Honor.

The Master: I don't want it.

Mr. O'Brien: We have it there somewhere.

The Master: I won't take it again. Next question.

Q. Did you have anything to do with the locating of the holder at 132nd Street, determining its location? 15405

A. Well, I don't know as I had a great deal to do with it. The matter was discussed, and I think it was decided upon by the chief engineer.

Q. Did you have to do with the determining of the size of the mains that were to be used in connection with the 132nd Street holder to feed Washington Heights?

A. Yes.

Q. What sized mains were put in to feed Washington Heights?

15406 George E. Woods, Cross.

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

Mr. Ransom: Mains from where? Mr. O'Brien ought to frame some of his questions with some degree of definiteness.

The Master: What kind of mains did you put in from 132nd Street and the North River to feed Washington Heights?

A. A 30 and a 20 is my recollection.

The Master: That was your judgment as to the size ought to put in?

15407 The Witness: Yes.

The Master: Next question.

Q. Is it not a fact that the pressure shown by the gauges were always excessive on Washington Heights?

A. In some sections probably so, due to the elevation. You might have high pressure due to the elevation.

Q. Isn't it true all along the line?

Mr. Ransom: When?

Q. After it was put in?

Mr. Ransom: After what was put in?

By the Master:

Q. After the 132nd Street holder was put in was 15408 there an abnormal pressure up there on Washington Heights?

A. I don't think so.

Q. All along the line?

A. No.

Q. Were there at some spots, as a result of elevation?

A. You would get pressure, your Honor.

Q. Would that happen down in the Manhattan Valley for instance?

A. No, the pressure would be low.

Q. The pressure would be low there?

A. Yes.

Q. And the pressure would be high at 181st Street, the high point?

A. Yes.

Q. How does that happen?

A. Well, taking the specific gravity of our gas, I should say that for every 10 feet in elevation you would get an increase of one-tenth in pressure, which is the difference between the weight of a column of air and a column of gas, so that when you get into a high elevation, simply as a result of this elevation, the difference between the weight of a column of gas and the weight of a column of air gives you one-tenth 15410 for every 10 feet of elevation.

Q. Well, your pipes are at a uniform depth below the surface of the street, are they not?

A. Yes, practically so.

Q. Does it make any difference whether the street level is 100 feet above sea level or at sea level?

A. Yes. You can have a delivery of gas from this end (illustrating), and you might have one inch pressure at this point, and the gas travels in this direction, and if this was 100 feet, you could have a two inch pressure, although your initial pressure was one inch.

Q. So, taking for instance Dykman Street, about 207th Street and Broadway, and running up Broadway 15411 to the crest of the hill at 181st Street, probably a rise of 100 or 150 feet, you would have a higher pressure at 181st Street than down at Dykman Street?

A. You would. It is a simple physical law.

By Mr. O'Brien:

Q. Is it not a fact that in the old case exhibit after exhibit was put in by the complainant to show excessive pressure on Washington Heights?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Q. Do you know anything about the services that were used on Washington Heights?

15412 George E. Woods, Cross.

The Master: Service mains, you mean?

Mr. O'Brien: No, the services, the pipes running from the mains into the houses.

The Master: Do you know anything about the service pipes?

The Witness: Well, the service pipes were put in Washington Heights the same as all through the city.

Q. Well, they were deficient to carry the excessive pressure, were they not?

A. No, absolutely not.

15413 Q. And that was proved to be an absolute fact?

A. Not that I ever heard of.

Q. You never heard of it?

A. No, and I do not think anybody else ever did.

Q. Was that part of your duties to know that?

A. It would be, yes.

Q. Was your judgment used in connection with the location of the holder at Kingsbridge, Sedgwick Avenue and Fordham Road?

A. Yes; I was in conferences as to the feasibility of the site, and so on.

Q. Did you recommend that they have a holder there?

15414 A. I concurred in the findings of the investigation made, and I was at many of those conferences.

Q. Did you recommend it yourself?

A. The whole thing was a matter of discussion. Yes, I approved of the location.

Q. Well, did you recommend it? Of course, you would approve of something your superior was determined on, naturally. Did you recommend it?

A. Yes, I recommended the site, the location.

Q. Did you recommend the locating and building of a holder up there?

A. I did.

Q. Did you recommend the putting in of this main in the Bronx for the purposes that you have mentioned?

A. I did.

Q. Did you recommend the location of the holder at 132nd Street in 1906?

A. I don't know whether I recommended that holder; I approved of the plan. Whether I made the recommendation as of that time, I don't know.

Q. Did you determine the size of the mains to be built, to take the gas from the 132nd Street holder to Washington Heights section? 15416

A. I had considerable to do with it.

Q. You were then assistant chief engineer?

A. Probably not, but at the same time I was in those discussions as to the conditions of that territory.

Q. And you were an important factor in the determination of those things?

A. Yes, I flatter myself to think that I was.

Q. You have property at Inwood, this company has, hasn't it?

A. It has.

Q. Have you got a holder there?

A. We have. 15417

Q. How large a holder is it?

A. Oh, enough to last about fifteen minutes on Washington Heights.

Q. Well, how large is it?

A. 60,000 cubic feet.

Q. Who determined that that should be built, and when was it built?

A. The Lord only knows, about seventy years ago, I guess.

Q. That is an antique, is it?

A. Quite old, yes.

15418 George E. Woods, Cross.

Q. Located on how big a size plot?

Mr. Ransom: I object to this line of inquiry. We are not claiming a return on this property or this holder. It is not a going property in existence. It is an insignificant element of property that is not in any use.

The Master: Objection sustained.

Mr. O'Brien: We have here the question of a mains system, the question of using the reserve of this company to take care of these affiliated companies, and the question arises naturally what they could have done to take care of

15419 Washington Heights, if they did not have enough means in 1906, when they put a holder in a given situation, under given conditions, in 132nd Street.

The Master: Objecton sustained.

Mr. O'Brien: If it could not have been put at Inwood.

Mr. Ransom: If we had put it in at Inwood, the defendants would have raised a terrific howl, with some degree of reason; therefore, it was left out, this company has very carefully left out property not new and usable.

Q. Did you consider the locating of a holder at

15420 Inwood at the time you were deliberating as to the locating of a holder at Sedgwick Avenue and Fordham Road?

Mr. Ransom: I object to that as immaterial and incompetent.

The Master: He can answer. Objection overruled.

A. I think—I do not think that was considered at all. We did not believe it was an appropriate place to build the holder.

Q. Why?

The Master: Objection sustained.

Mr Ransom: I think that should be answered; I think he should explain why.

The Master: Well, I don't. I am familiar with lots of locations. I don't want to hear anything further about this.

Mr. O'Brien: Counsel wants the question answered.

The Master: I don't care what counsel wants.

Q. Mr. Woods, is a separate account kept of the maintenance of the mains shown on Exhibit 282, so that that might be determined without going into the 15422
general accounts?

The Master: Objection sustained.

Mr. O'Brien: Is that ruling on the ground that the witness is not in the bookkeeping department?

The Master: Yes.

Mr. O'Brien: And that the witness is not charged with distribution?

The Master: No. On the ground that I am not going to allow you to cross-examine this witness about methods of bookkeeping.

Mr. Ransom: Mr. Brundage will be offered for examination and will be very glad to answer 15423
these questions.

Mr. O'Brien: Well, are you going to produce Mr. Simpson?

Mr. Ransom: I have given notice that I am going to produce Mr. Brundage and Mr. Teele for your cross-examination.

Mr. O'Brien: Well, is Mr. Simpson going to be produced?

The Master: Next question.

Mr. O'Brien: Your Honor, I would like to know that now, if Mr. Simpson is going to be called as a witness.

15424 George E. Woods, Cross.

The Master: I can't ask counsel to disclose whom he is going to call.

Mr. O'Brien: You can get more out of him than I can.

The Master: I don't think I have a right to ask him.

Mr. O'Brien: Well, you made some ruling with regard to Exhibit 352.

The Master: What was that exhibit?

Mr. O'Brien: And then you made a ruling with regard to distribution items on two other exhibits.

15425

The Master: Yes, I refused to let this witness testify.

Mr O'Brien: And it was our understanding at that time that they were going to produce Mr. Simpson.

The Master: No, I had no agreement with anybody as to whom they would or would not produce. Those exhibits for identification have items of clerical hire and other things relating to cost of distribution, and I have refused to let this witness testify about it, because he did not know anything about it. It also had an item as to taxes, and I refused to let this witness testify.

15426

and I made no bargain as to what the other side would produce, nor did I make any direction, and if they do not produce witnesses who show me, I cannot find.

Mr. Ransom: I said this witness was called to testify fully as to distribution, and your Honor disagreed with me and said if I wanted to prove those matters I would have to call Mr. Simpson, and could not prove them by Mr. Woods, which I greatly regret.

The Master: I do not think I said you would

have to produce Mr. Simpson; I said some other witnesses.

Mr. Ransom: You referred particularly to Simpson.

The Master: If I did, I did not have Mr. Simpson in mind particularly. I had in mind some witness who could testify to the facts within his own knowledge.

Mr. O'Brien: Well, first, as to Exhibit 352, I understood you received that in evidence, and then later it was found it was all figures and costs, and they were not matters within the scope 15428
of the witness's particular functions in the complainant company, and you said you would allow it in, but would only take it for what it was worth, and your opinion was that it was worthless.

The Master: Well, I repeat that. Not worthless, but worth very little to me, standing as it is.

Mr. O'Brien: Well, if it is in the scrap heap I won't need to go into it at all.

The Master: You don't need to go into it.

Mr. O'Brien: Your Honor, on this question of the distribution items as they appear upon the 15429
several exhibits that were introduced since the witness Woods went on the stand—

The Master: There is no proof before me now other than the proof which appears in the books themselves, as to the cost of distribution.

Mr. Ransom: On that your Honor is in error. There were certain items of distribution concerning which you permitted the witness to testify.

The Master: What was that, replacement?

Mr. Ransom: No, certain of the figures under cost of distribution.

15430 George E. Woods, Cross.

The Master: Where are they?

Mr. Ransom: Not making up a total of 19.

The Master: What items?

Mr. Ransom: Well, there was— I would have to refer to the record. You allowed testimony on certain of the items under distribution.

The Master: Well, what kind of items?

Mr. Ransom: Well, with respect to mains. I think everything except commercial department expenses.

The Master: Yes.

15431 Mr. Ransom: And general officers and administrative expenses.

The Master: Yes.

Mr. Ransom: So far as the engineering side the matter of the expense in connection with mains, services and the like, you permitted proof of cost of distribution.

The Master: Well, what I had in mind was this. I don't know just how the record works out, but I intended to allow the witness to prove that to make—you have certain items that his experience has shown that you used so much coal and so much oil, and so much for this iron

15432 scrap and water and labor, and things of that sort, but when it came to cost—renewals and replacements, I let him state, but when it came to the cost of the clerical hire, executive officers and commercial branches and all those things that enter into this nineteen cents for distribution, I would not allow it.

Mr. O'Brien: Your Honor, I am at this point in the cross-examination. If the witness is the engineer who is to testify here as to the costs, actual and theoretical, of distribution, painting the holders, pumping the gas, buying the oil to

pump the gas, the labor involved in all of those items, I might want to cross-examine him on them.

The Master: Yes. You go on. I have allowed all those things. I have allowed everything I thought this witness knew anything about, the labor to paint the holders, to keep the holders in condition, and all those things.

Mr. O'Brien: That is one of the things I had in mind when I asked the question as to maintenance of the Kingsbridge holder and the mains in the Bronx, the witness having charge of those 15434 matters.

The Master: What is your question?

Mr. O'Brien: Well, I have asked that about fifteen minutes ago, and your Honor ruled it out.

The Master: Ruled what out?

Mr. O'Brien: Ruled out the questions that I asked as to the expense of maintaining.

The Master: No, you did not ask any such questions.

Mr. O'Brien: The question was, of course, in form, "Did you keep a separate account for the mains in the Bronx?"

15435

The Master: Yes, and that I would not allow.

Mr. Ransom: On page 1656 and following, your Honor, over the defendants' objections, allowed Mr. Woods to testify to the cost of distribution.

The Master: Let me see it.

Mr. Ransom: Down to "commercial expenses."

The Master: Well, I know I cut out the commercial expenses. Allowed this witness to

15436 George E. Woods, Cross.

state the cost of repairs to mains, services, meters, appliances and miscellaneous repairs. I let him state that.

Mr. Ransom: You also allowed him to testify to work on the consumers' premises, but when I came to commercial expense and administrative and general office expense, you said, "No further."

The Master: That is my recollection of it.

Mr. Ransom: Yes.

The Master: All right; go ahead, Mr.

15437 O'Brien.

Q. Mr. Woods, I want to ask you one or two questions about the gas that is used by the complainant company out of the Kingsbridge holder. You said that you could not give the exact figure and you approximated it as forty to fifty per cent. Can you tell me just on what that approximation is based?

A. No, it is only an estimate—an approximation as to what it is.

Q. Isn't there a separate main, and could not that be metered?

A. Could it be metered?

Q. Yes.

15438 A. It would be possible to meter it, but we have no meter on it. We have no meters at the holder stations at all.

Q. Does the 132nd Street holder still supply the Heights in part?

A. In part, yes.

Q. And you know the amount that the Central Union takes from Kingsbridge, do you not?

A. No.

Q. Is that still also an unknown factor?

A. Yes.

Q. Is there a meter at the Astoria tunnel at 132nd

Street and Locust Avenue to indicate the amount of gas that goes through there?

A. No.

Q. Is there a meter at the other side of the tunnel that indicates what gas goes into the tunnel at the Astoria plant?

A. Yes, a meter at the plant, before it goes into the holder.

Q. Does that go out of that in any other direction except into the tunnel?

A. It goes through either one of the two tunnels; it might go through the Ravenswood tunnel at times 15440 or through the Astoria tunnel.

Q. So that the holder would not give us any definite data as to what goes into the Astoria tunnel?

A. Well, there might be times that all of the gas, if it was water gas that was made at Astoria—that that portion of the coal gas which was enriched at Astoria might all go into the Astoria tunnel, but you would not know just what holders it went into after it got into the tunnel.

Q. Do you make any computations at all for any purpose at all of the amount of gas passing through a main by knowing the time the gas is turned on into the main and the time the pumping stopped? 15441

A. Do we make a computation?

Q. Yes, do you use such computations? Do you make them and use them for any purpose?

A. They are made for no particular purpose, simply as a matter of local reference. The only means we have and the only thing that is done at all—we keep no record, that is so far as permanent record is concerned—is to count the revolutions of the exhauster and get an approximation as to how much gas is going into a holder.

Q. What are the discs in the apparatus used for

that are up there, say in the Kingsbridge holder? You know when you turn on the gas into a main, do you not?

A. Oh, yes, we know that.

Q. And you know when you stop it?

A. Yes.

Q. And you know by these charts at what pressure it is going into that main?

A. Right.

Q. And mathematically you can determine from the indications on those charts the amount of gas that

15443 is pumped in there?

A. I do not think it is possible.

Q. Do you ever do it?

A. No, because I do not think that anybody else can do it.

Q. Why do you keep the charts?

A. Because that is a chart for the pressure. It is not an indication of the flow, it is an indication of how much pressure you have on your system.

Q. You mean that you only keep it for the purpose of indicating the pressure?

A. Absolutely.

Q. That does not help you to determine the amount

15444 of gas that is transferred from one company to another, does it?

A. No.

Q. Is there any meter at all indicating how much gas goes out of the 132nd Street holder and to what places?

A. No.

Q. Is there a meter at the 42nd Street plant or station that indicates what comes in there?

A. No.

Q. Or what goes out?

A. No.

Q. From any station?

A. Not any holder station.

Q. Or to any station?

A. We have no meters at any holder stations.

Q. Is there any at 44th Street?

A. No.

Q. Is there any at 67th Street?

The Master: The question has been asked and answered sufficiently.

Q. What is the purpose of the transit log? On my visit to the 42nd Street station I found there a record of the day's gas received up to a certain time and the 15446
places from which it came, and that book was called a transit log book. What is its purpose?

A. For the purpose of keeping a record of the amount of pumping going on at the different stations.

Q. It is expressed there in amounts per thousand cubic feet?

A. It is simply an approximation, Mr. O'Brien.

Q. Yes, that is it.

A. As to the amount of gas that is coming into that particular holder, and that is determined by the revolutions of the particular exhauster and is of varying quantities.

Q. You keep it from day to day? 15447

A. We do, simply as a matter of knowledge of local conditions. It has no bearing upon the accounts of the company in any way, shape or manner.

Q. I did not ask you about the accounts of the company. The fact does exist that at each station where gas comes in and gas goes out you have a transit log book and there is noted the amount of gas received and the various places it comes from; is that a fact?

A. Well, they have a log book.

Q. Will you say either yes or no to that?

15448 George E. Woods, Cross.

A. They have such a log book, yes.

The Master: Does it show where it comes from?

The Witness: No, only indicating, your Honor, as from 65th Street or some other place. They do not know where it comes from, but simply as a matter of record they say it is going to be transferred from 65th Street, and 65th Street may open a valve and let some come down. This log book is simply a daily memorandum for the purposes of the man in charge of the distri-
15449 bution of gas, to know approximately what is going on at these various places. There is no concise or definite means of knowing the quantity.

Q. Some one in charge of the station is responsible for that work of keeping the log book?

A. Oh, we have a man there.

Q. Yes, and it is a practice in every station?

A. They keep a record, yes.

Q. And practically in every station; and if I find the log book in a given station and turn to a certain date and I see for Ravenswood so many thousand cubic feet or million, and for Astoria so many thou-
15450 sand cubic feet, or 21st Street, I may assume that they have had pumped in that day approximately the amount that is set opposite these names of these sources of supply?

A. You might assume it, but it would be no real indication that that particular work had been done.

Q. It is being kept every day?

A. Oh, yes, we keep it every day.

The Master: We have got that.

Q. The log book gives the name of the station from which it is pumped?

A. Possibly.

Q. And the time?

A. Probably.

Q. And the pumping?

A. Yes.

Q. And then it has a notation "started" and "stopped," where the time is noted?

A. Right.

Q. And it has the amount of gas on hand?

A. Probably.

Q. At the start and at the stop?

A. Possibly.

Q. And another column to cover Astoria? 15452

A. Well, possibly. Those forms may differ from time to time in different places.

Q. Then there are notations in the column headed "remarks" that show whether the pumping is from 65th Street or from Astoria?

A. Possibly.

Q. Or from Ravenswood?

A. Yes.

Q. We find there the notations opposite these stations at 63rd Street, 65th Street, 58th Street, 42nd Street, 21st Street, 132nd Street, Kingsbridge, 111th Street, 44th Street, Ravenswood, 111th Street, Astoria, and we will know that the gas came from 15453 those sources of supply to this particular station?

A. No. Do you mean as of that log—as of the station that had that particular log book?

Q. Yes.

A. No, that log book you probably saw at 42nd Street and it is used there because the day man and the night man at 42nd Street they telephone in to him as a matter of information and ask for what is going on; so that he knows as to the heights of holders and so forth, as to where the gas should or should not be, and if I should want to have any information

for the moment as to the condition of things I could call up the 42nd Street station and I would say, "How is things at 111th Street or 132nd Street," and he would say, "They started pumping at this time," or some other. It is simply a matter of having somebody to try and pick these things up and put them together so that a man can call in and see how things are going or what the situation is on that day. The amounts that are recorded are pumped in and are relative, and that is all. They have no particular meaning and we do not use them in any way insofar
15455 as determining the exchange of gas is concerned.

Q. You take care of that by another method?

A. Absolutely.

The Master: Does not this same book appear at the other stations?

The Witness: Not to that extent. We simply use that station for telephoning, your Honor, into one particular station to give the conditions as they exist around, so that you would not have to telephone around to all stations to see what is going on. Each station would report to this station that they had pumped so much gas, the height of their holder was so and so. That is
15456 particularly important in the winter time when the make or send-out is very heavy, and in order to correct and keep our conditions right we have it all brought to one point so that we know exactly, and if there are any instructions to be given we give them to that one point and tell them what to do or to have done. You might call it a clearing house or bureau of information where they turn their stuff in and we are able to get it as a matter of daily operation only.

Q. You are speaking now of the 42nd Street holder?

A. I am speaking of the 42nd Street.

Q. The station?

A. Yes, where the reports are turned in as a whole.

Q. But the fact remains that every station has a log book by which they have some approximation of the amount of gas pumped in and the place from whence it comes?

A. That is right, yes.

Q. That is based, that approximation, upon the revolutions of the exhauster?

A. Right.

Q. At the source of supply? 15458

A. At the holder station. Not the source of supply, but the revolutions of the exhauster at the holder station.

The Master: What Mr. O'Brien means is at the sending out holder or the receiving holder?

The Witness: Well, I would rather have you ask that again, your Honor, because we do not call them receiving and sending out holders. The distributing holder both receives and sends out, you understand.

By the Master:

Q. I am using that term to describe the holder that is pumping the gas, as distinguished from the holder 15459 from which they are pumping it.

A. They would be pumping it from a transfer main.

Q. I know that.

A. Which might be from two or three holders at the same time.

Q. I know that; that is what puzzles me in Mr. O'Brien's questions. I understood that to be the condition, and that is why I could not understand, for instance, as to the 65th Street holder, when it was pumping gas, it would have a note in its log book that it was pumping gas from 132nd Street?

15460 George E. Woods, Cross.

A. Well, they probably would not have a note as to pumping from 132nd Street, but they might have a note of pumping from Ravenswood or Astoria. They would call it one or the other, and say, "I am pumping from Astoria or Ravenswood, which would mean either Ravenswood or Astoria, but they are pumping from the transfer line.

Q. Why do they say that, then?

A. It is just one of those forms that we had started, and it simply continued, because it is of no real importance where they got it from, your Honor.

15461 All we want to find out is approximately what they are getting in, simply as a matter of record at times, so we know approximately the amount of work a station is doing at some particular time.

Mr. O'Brien: Was there any particular reason for making Mr. Kellogg at the 42nd Street station the clearing house?

A. No.

Q. The bureau of information?

A. No particular reason, except that we thought Mr. Kellogg had the time there, while we were not operating to any great extent.

Q. So that we can go to the 42nd Street bureau

15462 of information and get these approximations of the amount that is transferred from all these different stations to one another?

A. They have a record.

Q. They have the record, and, whatever reliability may be placed upon it, they have it there?

A. They have a certain record, on which you cannot place any reliability.

Q. I have not got it clear yet where, we will say, in a given station the log book giving the amount of gas that is pumped to that station is regulated, you say, or determined or approximated by the revolu-

tions of the exhauster. Do you mean at the exhauster where that log book is kept?

A. At the holder station.

Q. At the holder station where the gas is received?

A. Right.

Q. Is there a meter at Ravenswood that indicates the amount of gas which goes into the tunnel?

The Master: Objection sustained. We have had all I am going to take on the question of meters, and where they are located and how they measure gas coming in and out.

Mr. O'Brien: May I complete that one question, your Honor? 15464

Q. Do the Mutual Company and the Standard Company have any meter to measure the gas that they transfer into the mains of the complainant company?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Where are the connections between the Mutual Company holders and the mains of the Consolidated Company?

A. There is a connection between the 14th Street plant and the Mutual plant. 15465

Q. That is at 11th Street, is it?

A. That is right.

Q. Which is three blocks away?

A. There are also a number of connections on the street as a result of subway construction whereby one or more mains have been taken out, two or more mains taken out, possibly, and one put in to cover the distribution of gas for the time being, on account of subway construction. There are quite a number of those places that are still connected as of today.

Q. The gas of the two companies, the Consolidated and the Mutual, is commingled, is it?

15466 George E. Woods, Cross.

A. Yes.

Q. Each company can pump into the mains that is used in common?

A. Yes, they can pump either way, it is used one way or the other, depending upon the differential in the lines.

Q. Where are the connections between the mains of the Standard Company and the complainant company?

A. The Standard Company and the Consolidated Gas Company feed out of separate lines at the holder
15467 stations and—

Q. You mean that the consolidated has a main running into the standard holders?

A. Right.

Q. And the Standard Company has mains running into the Consolidated holders?

A. Right.

Q. And there is gas commingled and transferred to and fro from those sources?

A. There is a commingling. It is a matter of economical operation, we do that rather than build two sets of holders and valve houses, etc., that is done.

15468 Q. They are used just as one system?

A. Right.

Q. And the records are kept as you have indicated?

Mr. Ransom: I object to that.

Q. Is that right?

The Master: Objection sustained.

Mr. O'Brien: I have not asked him any question about this transfer of gas.

The Master: No, but that the records are kept as indicated, I rule that out.

Q. How are the records kept of the pumping of

gas from the Standard to the Consolidated stations, and from the complainant to the Standard Company?

Mr. Ransom: I object to that as already covered.

The Master: What do you mean, is there a log book?

Mr. O'Brien: Yes.

A. Well, at times some of the Standard gas goes to the 111th Street station. You may have seen a log book there which said so much gas from 115th Street, or the Standard works. They would also send it down to 63rd Street, to their own holders. It 15470
might go one place or another. It is all being fed, however, into the general system, so that it would not make a particle of difference insofar as the general result is concerned, because that is all corrected at the end of the month for each company.

Q. Do they have log books in the stations of the Standard Company, too?

A. A log book—they have books there, yes.

Q. Do they have a log book at the stations of the Standard Company by which they make a record of the amount of gas pumped from the complainant company to the Standard Company?

A. I don't think so, no. 15471

Q. Have they log books in any stations of the Mutual showing the gas pumped from the complainant company to the Mutual?

A. I think not.

Q. But there is a direct connection between the 14th Street station and the Mutual plant?

The Master: He has so testified.

Q. Now, how is the record kept of that gas that is sent from one place to the other, the Mutual at 11th Street to the complainant company station at 14th Street, and from 14th Street to 11th Street?

15472 George E. Woods, Cross.

A. It would make no difference whether it was kept or not.

Q. Well, now, how is it kept?

The Master: What records are kept, if you know?

The Witness: I don't know that the Mutual keeps any record. It may be possible that 14th Street might have a record of what they pump in, recorded by their exhauster.

Q. Isn't it your business to know that?

The Master: Objection sustained.

15473 Q. Why don't you know, Mr. Woods, definitely whether they have such a record?

Mr. Ransom: Objected to.

The Master: He may answer that.

A. Because insofar as the Mutual is concerned I did not think it of any importance, whether they have such a record or not.

The Master: You don't pay any attention to it?

The Witness: No.

Q. Isn't there a record kept in the governor house at 14th Street?

A. Yes, there is probably some record there.

15474 Q. There is a definite record kept there, isn't there?

A. There is a record kept there, yes.

Q. They have an intricate system of mains, but the record of the valves, when the pumping begins, and when they stop, they have got that, haven't they?

A. Yes, they probably have a record of when it is started, and they keep a record of that kind, yes.

Q. And the quantity of gas that is sent out?

A. They may have, yes, an approximation.

Q. They have the amount they send out at 122 Bowery, haven't they?

A. They have not.

Q. Does the complainant company use any Mutual or Standard or New Amsterdam Company's services to reach its own consumers?

A. No, I don't think so.

Q. Now, give me that definitely.

A. As far as I know, I don't know of any such case.

Q. You are brought here as the engineer to talk about distribution, are you not?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Does the complainant company ever put any of 15476
its meters on the services of another company, any of the other companies?

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

Q. I am speaking of consumers' meters?

A. There may be a few instances. I do not know, Mr. O'Brien. The reason I say that there may have been times where there were two or three meters in a building of some description, and that one service had been taken out, or something of that sort, as a result of a repair, and that the services in the building were ample to provide the facilities for that building they might have hooked the meters on those serv- 15477
ices, simply as a matter of spending money putting in another service, that condition might apply in some instances.

Q. Well, it is done considerably, isn't it?

A. To what extent I don't know, I don't think to any great extent. Certainly they would do it rather than spend money to put in a service where it is not necessary.

Q. Never mind the reason, is it not a fact that it is done considerably?

A. I would not undertake to say to what extent, because I don't know.

15478 George E. Woods, Cross.

Q. Why don't you know, if you are acting chief engineer?

A. Because I said I don't know. I don't know the amount. Whether I should know or should not know, I can't tell you just what extent it is.

Q. You have not brought any data here that would refresh your memory on that, have you?

A. I have not.

Q. Where would the record be kept. If we went into the offices of the company at 15th Street and Irving Place to find that record, where would we find

15479 it?

A. I don't know whether that would be found in the accounting department or in the service department; I would not like to say right now.

Q. In the service department, did you say?

A. I don't know whether it is in the accounting department or the service department; I could not say.

Q. Have you a department called the service department?

A. Mains and services, yes.

Q. In the mains and services department is there a special branch covering services?

15480 A. No.

Q. They are not separated from the mains?

A. No.

Q. Are you not able to say that there is some definite record kept of when that is done?

A. If it is I don't recall it.

Q. The territories that I have mentioned supplied by the several companies overlap one another?

A. Yes.

Q. The complainant company distributes gas to the consumers in the territory covered by the Standard?

A. Right.

Q. And the Standard covers territory which is also covered by other companies?

A. Right.

Q. And so with the Mutual, it overlaps into the territory covered by the Consolidated?

A. Right.

Q. And that is done indiscriminately throughout the city, or throughout the part of the city where all of them are operating?

A. Yes, where there are two companies operating in one district.

Q. And the same thing would be said of the New 15482
Amsterdam Company in every respect that I have mentioned as to the other companies?

A. Where they cover the same territory there is that condition.

Q. And you could go along, and in one house you might find a Consolidated meter on a given street, taking care of some consumers there, and you might find a Standard meter?

A. That is right.

Q. And drawing both from the Consolidated main?

A. That might be possible.

Q. It is true, isn't it?

A. At times, yes. There are times as I stated, 15483
when the mains have been cut out—

Q. I don't mean temporarily, I mean permanently. Isn't that a permanent condition on some streets and some houses?

A. I do not know of any permanent condition, although there might be one or two instances of that kind. The different mains might be fed from one particular main, which might be a Consolidated or a Standard or somebody else.

Q. You are acquainted with the mains system of the whole city?

A. In a general way.

15484 George E. Woods, Cross.

Q. So far as the affiliated and complainant companies go? Did you say only in a general way?

A. I am familiar with it, yes, but I would not undertake to tell you the size and location of every main in the city.

Q. So you have answered on page 1655 as follows, didn't you, "So that at all times you are familiar with the matters involving cost of distribution as to these companies? A. I am."

A. Right.

Q. And that would involve the knowledge of the
15485 distribution system of the various companies?

A. Yes.

Q. Well, now, in many streets we might find the mains of three companies?

A. Yes.

Q. Maybe four?

A. Yes.

Q. Of those affiliated companies?

A. Yes.

Q. And some of them in use and some not in use?

A. Oh, no, I guess they are all in use.

Q. What?

A. They would be in use.

15486 Q. They would all be in use at the same time?

A. Absolutely.

Q. Well, in many streets?

A. Wherever they might be.

Q. Well, now, tell me, isn't that true about the city pretty generally?

A. Yes, I say that those mains—there are mains of the different companies in some streets.

Q. They are in the same territory throughout the Boroughs of Manhattan, aren't they, and Bronx?

A. In a good number of them up in the Bronx, and in Manhattan, but not on Washington Heights to any extent, you understand.

Mr. Ransom: Some overlapping.

Q. And have you got a diagram indicating all of those mains, or maps?

A. We have.

Q. And they would give us the picture of the mains system as it is represented to be by the complainant company and affiliated companies?

A. It would.

Q. And on a large scale, and would have all of the details, wouldn't it?

A. You would have quite a few details, yes.

Q. And would have on that different colors to in- 15488
dicate where the service of one company was, and the service of another company in a different color?

Mr. Ransom: I object to this line of inquiry: it is already gone into.

The Master: I will allow it.

Mr. O'Brien: Very important, your Honor. We are getting into the cost of distribution, your Honor.

The Master: I have allowed the question.

Mr. Ransom: All of these charts were put at the disposal—

Mr. O'Brien: You say the cards were all on the table? 15489

Mr. Ransom: All of the maps were at the disposal of the defendant to see what—

The Master: I allowed the question. These charts or maps that you have in your office show these distribution mains in various colors?

The Witness: That is right.

The Master: Next question.

Q. Nobody asked you to produce them in connection with your testimony?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

15490 George E. Woods, Cross.

Q. Are there any streets, Mr. Woods, where there are mains that are not in use?

A. I don't know of any.

Q. Who makes it his business to find out whether they are in use or not?

A. Why, we know they are in use; they are connected up and must be in use.

Q. Technically connected up?

A. Absolutely.

Q. You think they all contain some gas?

A. Right.

15491 Q. And this practice has been going on during the period covered by your testimony, running back to 1902, say?

A. The practice of mains being connected?

Q. Yes.

A. Yes.

Q. And has his system of transferring gas you have described been going on since your connection with this company?

A. Practically; not to the same extent that it is today.

Q. When did it change?

A. Well, the change is a distinction, more than anything else, as the result of our increased capacities on the other side of the river.

15492

Q. Well, going back to the period prior to the establishment of the plant at Astoria, did you—will you tell us just about what the limitations were upon this system of transferring gas?

Mr. Ransom: I object to the question as vague and indefinite.

A. Too broad for me to answer.

Q. What is that?

A. I say it is too broad and vague for me to answer; I do not understand it.

Q. When you first came with the company, that was in 1891, was it?

A. 1901, with the Consolidated.

Q. When you first came with the complainant company, what was the system then in vogue, and to what extent was gas transferred to and from the complainant and affiliated companies?

Mr. Ransom: I object to that as immaterial, not within the issues of this case, and simply taking up the time on inconsequential matters.

The Master: I will allow it.

Mr. Ransom: Exception. 15494

A. Well, as of that time—that was about the time that this exchange of gases started.

Q. Wasn't it going on at consolidation, at the moment of consolidation?

Mr. Ransom: You mean 1884.

A. You mean it started in 1884?

Q. Yes.

A. Yes, but we did not—the consolidation of 1884 was the joining together, as it were, of companies that were wiped out of existence and formed the Consolidated Gas Company.

Q. I mean not from the companies that went out of business legally, but didn't the transfer begin between the complainant and some of the affiliated companies at the time of the consolidation? 15495

Mr. Ransom: I object to the question. There is nothing here to indicate there were any affiliated companies. The record clearly indicates to the contrary.

The Master: I will let the witness state.

A. I don't understand. We do not call them consolidated companies. We call them consolidated and allied or affiliated companies. If you refer to the time when the—

15496 George E. Woods, Cross.

Q. Just confine your testimony then to the complainant and the allies.

Mr. Ransom: I object to the question. There isn't anything to indicate there were any allies. As a matter of fact, it was the bitterest sort of competition until recently.

By the Master:

Q. When did the Consolidated start to transfer gas and exchange gas with the Standard?

A. I should say that was in 1901, your Honor. It may have been the latter part of 1900.

15497 Q. How about New Amsterdam?

A. I should say about the same time.

Q. How about the Mutual?

A. I should say just about the same time.

Q. How about the Central Union?

A. The Central Union, as of that time I don't think it was going on at all.

Q. Well, was there a complete transfer beginning in 1901 or 1900 between the Standard and the Consolidated, of gas?

A. Well, not to the extent that it is now going on.

Q. That is what I am trying to get at. Where
15498 do you limit it, is what Mr. O'Brien has been trying to get out for half an hour.

Mr. O'Brien: Not to the extent that we do now.

The Master: You repeat yourself again.

Q. When did it begin?

A. I mean we have this large transfer system now.

The Master: Wait a minute.

Q. Didn't all the gas of the Standard exchange with the gas of the Consolidated when the transfer started in 1901? Weren't you in a position to pull out all of the gas of the Standard tanks or holders, and they to pull out all of yours?

A. We were not.

Q. Well, what was the change in the system?

A. Well, we have built additional holders, holders that we required, and when those holders were built they were designed for the accommodation of more than one company. Prior to that time every company had their own holder, distribution stations, and as time went on, whenever holders were built, after that period of time, the purpose was to have them perform the work of more than one company, bringing them together at that point for the purpose of saving the building of so many holders and so many 15500
different sites.

Q. No, but the transferring of the gas was just as complete in 1901 as it is now, wasn't it?

A. Oh, no. When the transferring began in 1901, the transferring was not to the same extent because everybody had their own facilities at that time, they had been a unit of their own, so that what transferring took place was an evolution, it proceeded gradually and grew up, it did not go from their own plants into a general transfer or anything, there wasn't anything like that, your Honor.

Q. Well, how did it first start?

A. Well, I have testified the first starting was— 15501
let me see. It has been a long time back, and I cannot—I think probably the first start of it was the building of the 111th Street holder.

Q. By whom?

A. By the Consolidated Gas Company; at which time the Standard—

Mr. O'Brien: What year was that?

A. I think these holders were started in 1902, is my recollection.

Q. Well, now, that 111th Street holder was hooked up with one of the Standard holders?

15502 George E. Woods, Cross.

A. They were hooked to the Standard mains.

Q. To the Standard mains?

A. Yes, the Standard distributing mains, and the Standard transfer main was hooked up into the 111th Street holder, and it was—that was my first recollection of the general transfer starting, as of that time.

Q. Well, then, that 111th Street holder could pump the gas from the Standard holder, couldn't it?

A. It could.

Q. From all of the Standard holders?

A. Yes, it was connected to all the Standard hold-

15503 ers.

Q. And the Standard holders could pump 111th Street?

A. They could probably pump 111th Street.

Q. Could it pump from other holders?

A. Well, they could have pumped from other holders because the Consolidated transfer system was connected up with the holders at that time.

Q. Well, then, what difference is there between what is being done today and what was done then?

A. I say that I do not think there is any difference except to a greater extent, a larger volume at this time, your Honor. The difference started as of about

15504 the time of that holder. That was about the time it started. It started in about the same manner as now.

Q. Once you started a system of transfer there was a complete system of transfer?

A. Yes.

Q. Simply a question of volume?

A. That is correct.

By Mr. O'Brien:

Q. And that was in 1901?

Mr. Ransom: You were asking about 1884; not 1901.

The Master: There you go again, starting something. Go on. Next question.

Q. Perhaps your memory doesn't go back to the period when you were with the Standard. There was transferring going on then, too?

A. No, absolutely not.

Q. Between some of the companies, some of the allies and the complainant?

A. If there was, I did not know of it at that time. I do not think there was.

Q. Now, during the period from 1901, while this transferring of gas was going on, your company of the allies and the complainant were making other extensions to the mains systems, putting in services 15506
here and there, and extending their distribution system, repairing it; isn't that right?

A. To some extent, yes.

Q. Well, they have been each of them spending moneys from year to year on extensions and repairs to the distribution system?

A. Oh, absolutely.

Q. And they have each been acquiring new customers or consumers and they have been taking care of them by putting in new services and new meters?

A. Right.

Q. And excavation in the streets has gone on to take care of the leaks, extensions and repairs; is that 15507
right?

A. Right.

Q. And replacements and renewals have gone on in the distribution system?

A. That is right.

Q. Covering the same territory, the same streets that were used by these various companies?

A. That is right.

Q. And they have been doing this independentlly of one another?

A. No, the Consolidated Gas Company's meter,

15508 George E. Woods, Cross.

mains and service department has been doing most of that work.

Q. They have been taking care of all of it?

A. Yes.

Q. And it is all combined under the chief of the distribution system, Mr. Simpson?

A. Under the mains and service department.

Q. Yes.

A. Yes.

Q. And that has been under your general direction?

15509 A. Yes.

Q. As acting chief?

A. In the absence of the chief engineer.

Q. In the absence of Mr. Bradley?

A. Yes.

Q. You know generally of all the repairs that have been going on?

A. I would not say that, no; I do not.

Q. There isn't a separate gang, say, in the service and mains department—you don't use a separate gang to do the work in a given street for each of the companies? They do it and charge up and distribute the cost, rather?

15510 A. That is right.

Q. In other words, the complainant employees do that work, and you prorate the expense?

A. Charge them for the actual work, and we also charge them for part of the overhead, office overhead.

Q. Part of the overhead; and somewhere, in some account, you charge up that overhead, that proportion of the overhead to take care of the work that is done for the benefit of one of the affiliated companies?

A. That is right.

Q. And so with replacements and renewals, if it

happens to be a replacement for the benefit of one of the allies, you charge it up to the allies' account?

A. Renewals, whatever is being done by the company for these companies, is charged to them.

Q. And would excavations be made for one company at one time and in the same week or the next week, further excavations for another company to take care of repairs and replacements and renewals?

A. Quite likely.

Q. And the cost of labor then, the different companies would have the same cost; you are using the same staff all the time; is that right? 15512

A. To a great extent, yes.

Q. And that would hold as to all of the affiliated companies except the Astoria and the New York and Queens?

A. Practically so. A good part of the work of the Central Union Company, the Central Union work is not under the control of Mr. Simpson.

Q. The distribution system of the Central Union, which would include the Northern Union and Westchester Lighting, is a separate matter altogether, and would not be included in the answers you have given to the last twenty-five questions?

A. That is right. 15513

Q. And the same you would say to the New York and Queens Company?

A. That is right.

Q. Do you transfer any gas to them?

A. No.

Q. Do you feed them any gas at all?

A. Absolutely none.

Q. They get none from Astoria?

A. No.

Q. None from Ravenswood?

A. No.

15514 George E. Woods, Cross.

Q. They just have a thoroughly independent plant?

A. Right.

Q. The Astoria hasn't any distribution system?

A. No.

Q. So you haven't any distribution expense in connection with the Astoria Company?

A. That is right.

Q. Is there even to a small degree, any expense that is called distribution expense for the Astoria Company?

A. It is small; I think they have about seven-tenths
15515 of a mile of street mains.

Mr. O'Brien: I would request, your Honor, that I be given an adjournment until Monday, so that I can take up some very important and peremptory work in connection with a gas case that I have under my charge. I have been directed yesterday, by Judge Greenbaum, to have in the findings, or proposed findings, not later than Friday of this week, I think it is, and I must find time to do that.

The Master: Application denied.

Mr. Chambers: I appreciate Mr. OBrien's situation, and I join in his application.

15516 The Master: Application denied.

Mr. O'Brien: Well, I note an exception to your Honor's ruling.

Adjourned until Thursday, October 23, 1919, at 9:15 A. M.

Last Complainant's Exhibit 358.
Last Defendants' Exhibit MM.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 15517

New York, Oct. 23, 1919

Before ABRAHAM S. GILBERT, Special Master.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission.
MR. O'BRIEN, of Counsel for defendant Swann.

15518

GEORGE E. WOODS resumed the stand.

CROSS-EXAMINATION CONTINUED BY MR. O'BRIEN:

Q. Mr. Woods, now, that we have been dealing with the question of transfer of gas, it might be appropriate here to ask you this question: So far as the financial arrangements go between the complainant company and the allied companies, covering transferred gas, the mutual compensation of dollars and cents is determined by estimate and not by any measurement of gas itself?

Mr. Ransom: Does the question refer to quantities or price? 15519

The Master: The amount paid in dollars. Is that a fact; is that an estimate?

The Witness: In dollars?

The Master: Yes, the amount paid; is that based on estimates?

The Witness: It is based upon a calculation as to the requirements of the companies.

The Master: Just answer the question; is it based on a mere estimate, a guess?

The Witness: No, it is not on a guess at all.

The Master: The next question.

15520 George E. Woods, Cross.

Q. Well, is it based on an estimate?

Mr. Ransom: I object to the question. What is based on an estimate?

The Master: It is cross-examination.

Mr. Ransom: I ask that the question be made definite.

The Master: I think I know what Mr. O'Brien is after.

Mr. Ransom: I think he ought to state it.

The Master: It is based in part upon an estimate.

15521 By the Master:

Q. As I understand it, there is an accurate record kept of the make of each company?

A. That is right.

Q. Of the requirements of each company?

A. That is right.

Q. To that extent it is not an estimate?

A. No.

Q. It is an actual measuring of gas?

A. Yes.

Q. You know how much you make, and you know how much you sell?

A. Right.

15522 Q. Now, there is a loss of gas?

A. Right.

Q. That is estimated as between the various companies, isn't it?

A. Yes.

Q. That is the only element that is estimated?

A. That is right.

Mr. Ransom: The distribution between the companies is on a certain ratio.

The Master: Yes, is estimated.

By Mr. O'Brien:

Q. As to quantities of gas transferred from the

complainant company to the allied companies, or from any of the allied companies to complainant company, they are based upon a system of calculation that involves the output of each company, the consumption of the consumers of each company, as shown by their meters—is that right?

Mr. Ransom: I object to the question. It is argumentative.

Mr. O'Brien: There is nothing argumentative about it. I want the witness to tell us in his own way. We had a garbled explanation by Brundage, but it didn't explain, and a crude drawing on a piece of paper. 15524

Mr. Ransom: Let the witness tell it in his own way. If you want Mr. Woods to tell it, he will do so.

(Question read by stenographer.)

The Master: Answer the question.

A. The output of each company and the sales to the consumers is one of the considerations.

Q. Go ahead and tell us how the calculation is made, taking the output, or the turn-out, do you call it?

A. The send-out.

Q. The send-out of each company. 15525

A. I have a little memorandum—

Q. Do you need the memorandum; do you want to consult your memorandum to refresh your memory on this?

A. No. Each of the companies' total requirements is ascertained by adding the gas sold in cubic feet to the consumers, and the gas used by the companies, to the ratio of loss in volume due to condensation, leakage, slow meters and temperature of the gas at consumers' meters, and what is called this loss, being called by the Public Service Commission "Gas unaccounted for."

This volume, this loss in volume of the entire system is ascertained in compliance with the requirements of the Public Service Commission, by deducting the sales and used of all the companies from the total send out of all the companies. Of this unaccounted for gas, three per cent of the total send out is attributed to loss by condensation, slow meters and difference in temperature at the consumers' meters. Because it relates to meters, and therefore, to sales, to each company is distributed its ratio represented by the ratio of its sales and used to the combined sales of all the companies.

15527 The remaining unaccounted for gas is attributed to loss by leakage and other things, to mains, and this distribution is made on the basis of the ratio that the main mileage of one company bears to the total mileage of the entire system. Gas sold to the consumers, plus gas used by the company, plus that portion of the unaccounted for gas attributed to that company, makes up the total requirements for that company. The difference between the requirements of the company and the send-out of the company, represents the amount, or to what extent this company is a creditor or debtor of the transfer system.

Q. Have you completed your explanation, Mr.

15528 Woods?

A. That is right.

Q. Is there anything in detail you would like to add to it?

A. No, that covers the situation.

Q. First, let me ask you, in order to analyze this description you have given us of the system, what is understood in the company and in your testimony by the term "total requirements"?

Mr. Ransom: I object to the question as already asked and answered.

The Master: I will allow it.

Mr. Ransom: Exception.

A. The gas sold to the consumer by the company, plus the gas used by the company, plus their portion of the unaccounted for gas. That makes up the total requirement.

Q. Now, think that over a minute, Mr. Woods, I don't want to crowd your ideas—

Mr. Ransom: Are you referring to plant requirements or volume of gas required?

Mr. O'Brien: I am asking him for a simple analysis of his definition.

Mr. Ransom: I object to the question unless the interrogation is made specific either as to 15530
plant requirements, manufacturing requirements, or as to requirement for supply to consumers.

The Master: The witness said that one of the factors was the total requirements of the company. Mr. O'Brien is asking him to explain and more definitely define "total requirements," as he uses that term I will let him do it.

Mr. O'Brien: He has proceeded to do that, and included one or two additional factors in the definition. I want to give him a chance to unravel it.

The Master: You say you first take the total requirements? 15531

The Witness: I said we take the total sales of the company to the consumers, plus the amount used by the company, plus that portion of the unaccounted for which is charged to that company. That would be their total requirements for the purpose of selling that amount of gas. That, however, does not apply to plant capacity. That is requirements.

The Master: Nor does it figure the make?

The Witness: It has no bearing on the make.

Q. Perhaps I had better have read to you your an-

swer, Mr. Woods, first before I ask you the next question. I will ask the stenographer to do that.

The Master: Why?

Mr. O'Brien: I will tell you why. You will remember when I asked him before to explain this system he proceeded to say, as you had almost indicated in your question to him previously, that they take the total send-out, and then take the total requirements, and then the unaccounted for, first on the basis of three per cent, and then he proceeded to explain that, and so on. Now, when
15533 I ask him what total requirements are he proceeds to embody in the definition of total requirements some of the other factors in the computation. He doesn't mean to do it, I know, but it is going to show that way in the record.

The Master: I think you are in error about that. I think it is perfectly clear.

Mr. O'Brien: I will ask the stenographer to read the answer.

The Master: I will not permit it.

Mr. O'Brien: Well, we will only get all tangled up.

The Master: Let us see if I understand it. Mr.
15534 Woods, as I understand it, in order to determine the amount to be debited or credited to the Consolidated Gas Company on account of the transfer system you first find out the total requirements of all of the companies for the month.

Mr. O'Brien: If you will permit me, I want to ask the witness my questions in my own way. The idea is this: We have started with a term that he has not yet defined. I want to see just what total requirements mean, if in another part of his testimony he is going to use it with some other meaning.

The Master: You have got to let me put the question to see if I understand his testimony to date.

Mr. O'Brien: I might say, your Honor, that Mr. Brundage fell down on this, Teele tried to explain it and we could not get a definition from him, and now we have got—here is a perfectly puzzling answer, and I wanted to know what it meant, I wanted to unravel it if he is going to do it, and I want to do it in my own way.

The Master: I want to see if I understand it.

By the Master: 15536

Q. As I understand your testimony, Mr. Woods, it is this: You figure up first the total sales by each company for the month to the consumers?

A. Right.

Q. The total amount of gas that each company uses in its various offices itself?

A. Right.

Q. And you add to that this arbitrary or estimated percentage for lost gas?

A. No, you are wrong to that extent, your Honor. That is we find the sales of each company, we find the used of each company, and we find the send-out of each company, and the difference between the sales 15537 and used and the send-out is the unaccounted for gas.

Q. Of that company?

A. Of all the companies. We take them as a whole.

Q. I know that you have got to find out—well, as to each company you find out what they actually sold and used?

A. That is right.

Q. And as to what their actual send-out was?

A. Send-out from their plant?

Q. Yes.

A. Yes.

15538 George E. Woods, Cross.

Q. You find that out as to all the companies?

A. Right.

Q. Now, we will assume for the purpose of one single day to illustrate, that that shows that the Consolidated Gas Company sold and used ten million, and all the other companies sold and used ten million, and that the Consolidated make, allowing for the loss of gas, was ten million, and there would be no adjustment at all, would there?

A. Insofar as the Consolidated Gas Company—if their make was exactly the same as their sales and
15539 used, plus the unaccounted for?

Q. Yes.

A. Then insofar as the Consolidated, their account would balance as of that day.

Q. That is what I am talking about, the Consolidated as against the rest of the transfer system just now. Now, if, on the other hand, the balance of the transfer system, the companies other than the Consolidated, used and sold and were charged with a loss of gas of eight million and their make was only five million, then it would show from that that they got three million from the Consolidated altogether?

A. It would be; but in that case, your Honor, apply-
15540 ing your example, the Consolidated as of that day would have made thirteen million instead of ten million.

Q. Yes. I mean the Consolidated would have to have made more gas?

A. That is right.

Q. And the charge would show that all the companies together must have gotten three million feet from the Consolidated?

A. That is right.

Q. Then you have to apportion it as between the other companies, haven't you?

A. Yes.

Q. And that is arrived at in the same method?

A. In the same method.

Q. More or less by balancing the amount of make as against the amount of used and lost gas and sold gas of each company?

A. Right, your Honor. The only calculation—that is, any assumption whatever is based upon what the unaccounted for is between companies. We know exactly what the unaccounted for is; we know the sales and used.

Mr. O'Brien: You mean the total?

Mr. Ransom: Don't interrupt. 15542

Mr. O'Brien: I will interrupt right here.

The Master: No, you won't.

Mr. O'Brien: Well, I will withdraw from the symposium for a minute, and let you finish it, your Honor. That is all. I am going to ask this witness a few questions on this.

The Master: Sure, but you won't interrupt this answer.

The Witness: We know the sales and used, your Honor, and we know the send-out.

Q. Yes.

A. And we know that the difference—it is all going into one transfer system and we know as a combina- 15543
tion of all lines, we lose so much gas.

Q. Yes.

A. Which is called unaccounted for.

Q. Yes.

A. Now, the question comes as to how that distribution would be made.

Q. Yes.

A. In which we say that three per cent of the total send-out shall be reflected in the meters.

Q. That is arbitrary?

A. That is arbitrary. We have the total send-out and the total unaccounted for, and we say—

Q. This three per cent?

A. (Continuing.) The unaccounted for will be distributed equally between the companies based upon their sales and the ratio, depending, of course, upon the ratio of their sales.

Q. But the figure three per cent is arbitrary?

A. Yes. The remainder is attributed to the unaccounted for as a result of mains, and we divide that up on the main mileage. If the Consolidated should have fifty per cent of the mains, they would assume fifty per cent of that unaccounted for on that account.

15545 Q. I understand. So that to get the thing clear once and for all, the total amount of unaccounted for gas is known.

A. Absolutely.

Q. The percentage which is lost in slow meters and the percentage which is lost by mains and leaks is unknown?

A. That is right.

Q. That is approximated?

A. That is an approximation as to that distribution?

Q. So that you say arbitrarily three per cent is due to meters and the balance is due to mains?

A. Right.

15546 Q. And you apportion the three per cent as to meters on the amount of gas sold and used?

A. Yes.

Q. And you apportion the balance upon the basis of the extent of the mains?

A. The mains' mileage, yes.

Q. The number of miles of mains?

A. Based on the actual percentage as applied to the whole, and you have it exactly.

The Master: Go ahead, Mr. O'Brien.

Mr. O'Brien: Well, your Honor, I am going to record my objection here to the examination of

the witness being taken out of my hands and conducted by the Master. I know the Master's purpose is to untangle the proposition the witness is testifying about, but it has been done so frequently that I want to respectfully state that I think I ought to have a right to conduct my examination in my own way.

The Master: Your objection is noted.

Mr. O'Brien: The witness's capacity to answer questions, his knowledge of the affairs he is testifying about, his attitude while he is testifying, the presence of—the overpowerng presence of his 15548
superior here, one of the officers of the company watching him continually throughout the case, and counsel, too, butting in, all present a situation that I record my respectful protest against.

The Master: The protest is noted.

Mr. O'Brien: Now, I will ask that Mr. Carter be kept in his seat.

The Master: I think everybody ought to sit down except counsel who is examining.

Mr. O'Brien: Here is a man that has a salary of some thirteen thousand dollars, coached, as he admits, after he has testified here, your Honor, and with his boss standing over him here, watch- 15549
ing every question and answer he makes. He has got the witness completely coerced here.

The Master: Mr. O'Brien, I think that is perfectly ridiculous.

Mr. O'Brien: Well, it is not ridiculous, your Honor.

The Master: I haven't any doubt Mr. Woods can leave the Consolidated Gas Company tomorrow and get a job anywhere in this country.

Mr. O'Brien: We all draw our own conclusions from it.

The Master: I think any man who has had the experience he has had for thirty years does not depend upon any one company to employ him, and that is perfectly absurd.

Mr. O'Brien: I want this witness free, and I will ask that counsel take his seat.

The Master: I have asked that a number of times.

Mr. Ransom: I will ask that Mr. Edgerton, whatever he may be, take his seat.

The Master: Now, I won't do that because Mr.
15551 Edgerton is a consultant expert and has a right to confer with counsel, and has a right to stand up to do it. But other counsel in the case, when Mr. O'Brien is examining, are to take their seats.

Mr. Ransom: Will you please stand so that I may see the Court, Mr. O'Brien?

The Master: You won't have to look at the Court; don't you worry about it.

Mr. Ransom: The persistent tactics of Mr. O'Brien are such that I feel in justice to the interests of my clients—

The Master: Well, sit in the jury box and you can see me—so long as you sit.

15552 Mr. Ransom: Well, I will sit in this corner. He tends to keep everybody on their feet.

The Master: Oh, you get nervous about Mr. O'Brien, and it is not necessary.

By Mr. O'Brien:

Q. Now, Mr. Woods, beginning where we started a few minutes ago, let me ask you what the terms "total requirements" means as used by you?

Mr. Ransom: I object to the question as already asked and several times answered.

The Master: I will allow it again.

Mr. Ransom: I object to the question as in-

definite in form and it does not refer to what point of view.

The Master: I will allow it.

Mr. Ransom: Exception.

The Master: We will see what Mr. O'Brien is driving at. I think it is fully covered.

A. The total requirements, if applied to the actual requirements needed to supply and deliver gas to those consumers which are being supplied, would be the gas sold by consumers' meters plus the gas used by the company plus their percentage or ratio of the unaccounted for gas. It would require exactly that amount of gas 15554
to deliver that quantity of gas to the consumer, but has no bearing upon plant requirements.

Q. Well, do you include in that all of the unaccounted for gas?

A. Their ratio, their percentage of the unaccounted for gas, as I have explained it.

Q. Do you include—that includes the condensation?

A. That would be the requirements, they would require that quantity of gas.

The Master: Does that include condensation?

The Witness: It does, your Honor.

The Master: Leaks in mains?

The Witness: Right. 15555

The Master: Slow meters?

The Witness: Right.

Q. It includes the three per cent then, that you referred to?

A. Yes, sir.

Q. Let me, before I ask another question, ask you this: Do you use the term with regard to gas that is already made and consumed, gone out in the meters, or is that a term you use in making estimates for the future?

Mr. Ransom: I object to the question as indefinite.

15556 George E. Woods, Cross.

The Witness: I do not get that, your Honor.

The Master: I think I do.

Mr. O'Brien: I know—

By the Master:

Q. When you are talking about what the company will need for next year, you are talking about its requirements for next year, aren't you?

A. I am.

Q. When you are talking about the adjustment of the September accounts, you are talking about what was actually used as the total requirements?

15557 A. Right.

Q. So that total requirement is used in two senses?

A. Right.

Q. One in the present, and sometimes in the future?

A. One is the plant capacity, which is the requirement for a day, your Honor.

The Master: Those things mean so little, they mean nothing.

By Mr. O'Brien:

Q. Now, in the term, "gas used by the companies" do you mean the gas that is used in the works and in the commercial offices and in the central offices and in all branches of the company's property?

15558 A. Right.

Q. And is it metered?

A. It is.

Q. Where is it metered in the office at 15th Street and Irving Place?

A. You will probably find ten, twelve or fifteen meters in the basement there.

The Master: Do you use any gas up there?

The Witness: Oh, yes, it is the gas building, your Honor. We have most of our plants lighted with gas.

The Master: I thought it was a new building.

The Witness: It is; that is the reason it is lighted with gas, your Honor.

Mr. Ransom: Every modern appliance and fixtures?

The Witness: I will say, however, the electrical people have electricity in their part.

Q. Well, Mr. Woods, at each of the stations have you got a meter measuring the gas at the stations?

A. We have.

Q. And one meter to measure the whole station?

A. Well, I guess not; sometimes we will have two or three. 15560

Q. And is there any part of the quantity of gas used that is estimated?

A. Absolutely not. Those meters are treated exactly as any commercial customer.

Q. Are there not any street lights of the companies?

A. No street lights unless they are metered.

Q. Are any of the street lights—is gas furnished to any street lights by any of the companies on a lamp basis—per lamp basis?

A. I don't know. There may be a few street lamps. I do not know the number of street lamps. It may be fifty. I would not like to say. They, of course, have been based upon the consumption, as is always done, 15561 when they do a great deal of street lighting. I question whether we have 100 street lights in the City of New York.

Q. Well, why do you say a hundred?

A. Because I don't know.

Q. Is it an accidental matter?

A. Because I know it is practically nothing, Mr. O'Brien. I just made the statement of a hundred.

Q. What company has them?

A. I don't know. Probably the Consolidated may have a few. I do not know that there is a hundred, Mr. O'Brien.

15562 George E. Woods, Cross.

Q. Well, how did there come to be any? Isn't that a—

The Master: Don't waste any time on that. The item is entirely too small.

Mr. Ransom: Negligible, as shown by Exhibit 205.

The Master: It apparently is a conceded fact in this case that the city is not lit any more by gas; it is by electricity, and the number of gas lamps is not enough to raise any question about. Don't waste any time about it. I won't waste
15563 any more cross-examination on that. Even though Mr. Edgerton is interested in it, I am not.

Mr. O'Brien: Your Honor, I want to have every factor covered. I do not know how negligible you may think it is.

The Master: It is already covered. He says they don't have over a hundred.

By Mr. O'Brien:

Q. That is covered by contract, Mr. Woods?

The Master: Objection sustained. I will let you ask him one question. Are those lamps, whatever they may be, measured by meters?

15564 The Witness: They are not, your Honor.

The Master: So that in that respect your testimony was inaccurate?

Mr. Ransom: The amount of—

Mr. O'Brien: I object to counsel butting in here.

The Master: Don't tell me.

Mr. Ransom: Well, I can state—

The Master: Don't tell me now; that isn't the way to prove the case. The point Mr. O'Brien has been developing is this: You said that all the gas used is metered.

The Witness: Yes.

The Master: He calls your attention to the fact that there were some street lamps that perhaps are not metered.

The Witness: Right.

The Master: And you agree to that?

The Witness: I have, your Honor.

The Master: Now, you have got that point; let us get the next question.

Q. Now, we come to the question of condensation, and in this calculation covering transferred gas between the complainant and the allied companies, you 15566
use an arbitrary precentage of three per cent?

The Master: Not for condensation.

Mr. O'Brien: That is what he said.

The Master: No. For meters, slow meters.

A. Slow meters and temperature at the meters, three per cent of the total send-out, and that is the only split-up of the actual unaccounted for that we know, your Honor.

The Master: That does include an element of condensation?

The Witness: Yes.

The Master: As well as slow meters?

The Witness: Yes. 15567

The Master: Leakage of mains and things of that sort?

The Witness: Well, if there would be leakage, we would have it there.

Q. What part of that three per cent in the calculation is ascribed to leakage, or rather to slow meters?

Mr. Ransom: I object to the question as immaterial.

The Master: I will allow it.

A. The exact amount I do not know. From our own experience we find that our meters will run one

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and a half per cent slow taking them as a whole. I assume there would be one and a half per cent. In addition to that there are at different periods of the year times when the gas is registered at a temperature lower than sixty degrees, and insofar as we had made a correction of sixty at the works we would get an unaccounted for as a result of that. The balance was attributed to condensation as a result of a dropping of temperature.

The Master: Just answer the one question put to you. What part of the three per cent was
15569 ascribed, if you know, to the slow meter?

The Witness: I estimated it one and a half per cent, your Honor.

Q. So that half of the three per cent you ascribe to the slow meters?

Mr. Ransom: I object to it as incompetent.

The Master: Objection sustained.

Mr. O'Brien: I have to put that question that way, your Honor.

The Master: No, you do not. He said it is one and a half per cent.

Mr. O'Brien: I do not want him to come back later and have him say that it is one and a half
15570 per cent of something else.

Q. How do you divide the rest of the three per cent?

Mr. Ransom: I object. There is nothing to call for any division.

The Master: I will allow it.

Mr. Ransom: It is a pure matter of division between companies, which is a known factor.

The Master: I will allow it.

A. Between condensation and the temperature at which the gas is registered at the meter.

Q. Half and half?

Mr. Ransom: I object as immaterial and incompetent.

The Master: It is allowed.

A. Yes.

Q. Now, you say that the difference in temperature is taken care of by half of that one and a half per cent. That would be three-quarters of a per cent?

A. Yes.

Q. Is it not a fact that you have in each instance, in each station where gas is made, taken care of the difference in percentage by the correction of the registered make? 15572

A. Not necessarily, no.

Q. It is all reduced in your books; your send-out is the corrected make, is it not?

A. Yes.

Q. And you have in each instance in your manufacturing book reduced the registered make shown by the meters, station meters, to other figures on a basis of sixty degrees temperature?

Mr. Ransom: I object. What has that got to do with this matter?

The Master: It is perfectly proper cross-examination. I think it is already covered. I think the witness has already said that in addition to 15573 that corrected make there is still a variance by temperature at the meters, and I am going to let Mr. O'Brien make that clear. Let us have it.

Mr. Ransom: The gas does not reach the meters at the same temperature at which it left the works.

The Master: I think if I were cross-examining I would not spend any more time on it.

A. What is the question?

Q. You have in each instance in your manufactur-

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ing book reduced the registered make shown by the meters, station meters, to other figures on a basis of sixty degrees temperature?

A. Yes.

Q. Isn't that reduction made as to each day's output in your manufacturing book sufficient to take care of all differences in temperature?

A. It is not.

Q. Why not?

A. Because we cannot control the atmospheric conditions and if we have an extremely cold spell we are
15575 not in a position to control the temperature of the ground, Mr. O'Brien. It may be at times that gas will be registered at 35 or 40 degrees at the consumer's meter where we have sent it out at 60.

Q. At what depth below the surface is the temperature the same the year round?

A. Probably six or seven feet. We have had frost down four feet or four and a half.

Q. Then this additional difference in temperature that you think ought to be taken care of in the way that you have indicated only arises in the extremely cold weather?

15576 A. Yes, in the extremely cold weather is the time that you would have that large variation.

By the Master:

Q. Let me ask you this: Take my house down at the shore, if I go down there to spend the Christmas holidays and Thanksgiving and turn on the gas without heating up my house, that temperature is pretty low, is it not?

A. Right.

Q. It would not make any difference how deep the pipes were in the street, the temperature in the house would be low?

A. Right.

Q. If there is no heat on in my apartment in the morning when the gas range is turned on, the temperature is low?

A. Right.

Q. The apartment is as cold as ice before the gas is turned on. That has not anything to do with the depth in the street?

A. No.

Mr. O'Brien: You have not got the meter up in the kitchen or the parlor, your Honor?

The Master: Yes, I have, in the kitchen. The electric light meter and the gas meter are both 15578
in the kitchen facing Riverside Drive, in my apartment, where it is about twenty-seven degrees below zero when I get up in the morning.

Mr. O'Brien: Take it anywhere you want: if it is in the kitchen it is heated, is it not?

The Master: No, there is not any heat at all in the kitchen or in the two maids' rooms alongside of it, except one service pipe up through the maids' rooms, and they are complaining all winter long.

Mr. O'Brien: Everybody is not living on Riverside Drive: that is the point.

Mr. Ransom: You are now. 15579

Mr. O'Brien: There are a good many people paying their debts to this gas company in the share of gas bills that live in the kitchen a good part of their day.

The Master: That is true, too. They have not any heat at all in the winter time. That is the case I have in mind, in the tenement houses where they have no heat, but when they get up in the morning to cook their breakfast it is as cold as ice. Do not let us waste time on it.

Mr. O'Brien: I want to make my record, your Honor, in my own way. It does not seem to meet with the approval of the Master, but I want to make my record.

The Master: But I will not let you ask any more questions on that line.

By Mr. O'Brien:

Q. What about the summer? Do you not have directly opposite conditions so far as temperature around the consumer's meter is concerned than you do in the winter time?

15581 Mr. Ransom: Objected to.

The Master: It is allowed.

A. There would be.

The Master: And you sell less gas in the summer?

The Witness: Absolutely.

Q. Do you take care of that difference in temperature in any way?

Mr. Ransom: Objected to.

The Master: Allowed.

A. No, we assume that through the entire period. We know the absolute unaccounted for; it is simply a question of the segregation between mains and

15582 meters.

Q. Never mind getting off on that tangent, Mr. Woods. I did not ask you that.

The Master: Just answer yes or no so far as possible.

Mr. Ransom: Mr. O'Brien's questions do not permit it.

Q. Then one and a half per cent is chargeable to slow meters?

Mr. Ransom: Objected to.

Q. What, if any, factor is brought into this calculation to take care of fast meters?

The Master: Answer it.

A. None at all, because our average—taking the fast with the slow our average is one and a half per cent slow.

Q. You make an average of it now?

The Master: It is an arbitrary figure, Mr. O'Brien. You cannot get any more than that out of this witness. It is an arbitrary figure purely that this witness says they are justified in making.

Mr. Ransom: It is a mere matter of division anyway. 15584

Mr. O'Brien: He did not say that.

The Master: Yes, he did. He will say it now. Is that a fact, Mr. Woods?

The Witness: That is right, your Honor.

Mr. O'Brien: He did not say that before.

The Master: He did.

Mr. Ransom: It is a mere matter of division.

Mr. O'Brien: It is a mere matter of the consumer's money, that is what it is.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, if you will simply squelch the counsel here and keep him from making remarks there will not be any comments 15585 made by me.

The Master: I am doing the best I can, Mr. O'Brien.

Q. There is no difference made in that percentage as to any one of the companies, they are all treated the same as to that three per cent?

A. Right.

Q. And the three per cent is three per cent of the total requirements, is it not?

A. The total send-out.

Q. Of the total send-out, and that has not varied from month to month or year to year?

A. What has not varied?

Q. The three per cent?

A. No, that would not vary. That arbitrary figure is used every month.

Q. Having determined the difference between the total requirements, or rather the used and sold gas and the total send-out, you subtract from that difference three per cent of the total send-out; is that right?

15587 The Master: No.

Mr. O'Brien: That is what he said, your Honor.

A. Subtract from what?

The Master: From the total send-out. Mr. O'Brien has it all wrong. Read that question again.

(The question was repeated by the stenographer.)

The Master: That is not correct at all. Is that right?

The Witness: I do not know what it means, your Honor.

15588 Q. Perhaps you could give this better if you took figures in a hypothetical case. The total sold and used of the complainant and the allied companies is 10,000,000,000 cubic feet of gas; the total send-out is 12,000,000,000 cubic feet of gas; the difference between the two is 2,000,000,000 and that you would call unaccounted for gas?

A. Yes, if you have any such conditions. You see, we are on six per cent instead of fifteen per cent, as they were in Kings County.

Q. I am taking that as a hypothetical case. That

2,000,000,000 would be unaccounted for gas as defined by the Public Service Commission, you said?

A. That is what they call it, unaccounted for gas.

Q. Taking that 2,000,000,000 you subtract something from it, do you?

A. In that case, Mr. O'Brien, and using those figures, which would not be analogous to what we are using, we would take three per cent of that 12,000,000,000, you understand—

The Master: Of the 12,000,000,000?

The Witness: Of the 12,000,000,000, yes. Three per cent of the 12,000,000,000, which 15590
would give us, we will say, 360,000,000 which would go to meters. The difference between 360,000,000 and 2,000,000,000 in that case would apply to mains. We would have had the correct figure. You had the ten and the twelve and the only thing we do, we have segregated in the case of the Consolidated Gas Company, Mr. O'Brien—

Q. Do not go too fast, now.

A. In the case of the Consolidated Gas Company where the unaccounted for last year was 6.08 per cent or 6.11, I have forgotten the figure, one-half of the unaccounted for—one-half we have put into meters 15591
and the other half we have put into mains. We had absolutely the right amount in that segregation and we split them and put one in one and one in the other.

Q. Mr. Woods, you went a little too rapidly now. Never mind how our hypothetical figures fit into the situation; you have a difference of two billion between the total send-out and the total sold and used. That two billion is called unaccounted for?

A. Right.

Q. You take three per cent of the total send-out for each company, do you?

A. Right. That is, if there were many companies —you are referring to one company now?

Q. No, I am referring to companies.

A. We take three per cent of the total send-out, which in that case would be 360,000,000 feet.

Q. Yes, and would you subtract that from the two billion?

A. Oh, yes, you would subtact that from the two billion.

Q. The 360,000,000 would be charged up to slow meters and condensation?

15593 A. Yes.

Q. And difference in temperature?

A. Right.

The Master: Against each company, in the proportion of their sales?

The Witness: You have it, your Honor. That is absolutely the way it is done.

The Master: Then they take the balance and distribute it among the various companies in proportion to the mileage of their mains?

The Witness: Absolutely, that is sound. I do not know any other way to do it, Mr. O'Brien. I do not know anybody else who would.

15594 Q. What is that?

A. If you can find a better way—

Q. Never mind that; I am trying to get the truth on this record.

A. All right.

Q. The difference between two billion and the 360,000,000 which represents the three per cent is distributed on a different basis?

The Master: Objection sustained.

Q. It is proportioned to each company?

The Master: Objection sustained. I have had it clearly on the record, and I will not allow another question on it.

Mr. Ransom: It is clearly incompetent.

The Master: You will have to get to another point. I will not permit another question as to how it is done. It is absolutely clear.

Mr. Ransom: This is the third witness who has testified to it.

Mr. O'Brien: There has not been put on the record—I am going to have my own view on the witness's statement, your Honor. 15596

The Master: Yes, and I have my own view as to what will be put in.

Mr. O'Brien: I take an exception to your Honor's ruling.

Q. Mr. Woods, the distribution of that portion of the unaccounted for that is charged up to leakage in mains assumes uniform leakage in all the mains of all the companies, does it not?

Mr. Ransom: Objected to.

The Master: I will allow that.

A. Yes.

Q. It is simply in proportion to the miles of main of each company? 15597

A. Right.

Q. And the mile of one sized main is the same as a mile of a larger sized main, insofar as that computation goes?

A. Insofar as the computation goes, yes.

Q. And there is no difference allowed in any way in that computation for the age of the mains?

A. No, it is based upon main mileage.

The Master: The question is, is there any difference?

The Witness: No.

15598 George E. Woods, Cross.

Q. Were you the father of this plan?

A. I think I suggested it, yes.

Q. How far back has that been in use?

A. I think I testified that 1918 was the first time we started this system. Prior to that we were using the old unaccounted for percentage which were applied at the time the general transfer system went into effect back in 1901.

The Master: That was the system whereby you took each company and charged the balance against the Consolidated?

15599 The Witness: That is it, the Consolidated took the balance.

Q. Say that again, Mr. Woods?

A. Prior to this particular time, until this change was made, the gas companies bore an unaccounted for which was about their unaccounted for at the time that the use of the transfer of gas became general, and it was agreed at that time that they should bear their burden of their unaccounted for to the extent of what they were bearing at the time they came into the system. It might have been seven per cent, eight per cent, six per cent, etc., and they took that, and the Consolidated took what was left.

15600 Q. It came along from year to year uniformly?

A. From year to year, but it was finally decided that there might be a better way, and it was suggested that we try and develop some sort of plan instead of leaving the Consolidated to share what was left, it might be better to make some distribution—whether it was better or not, I don't know, I believe it is—to make a distribution so there was not any one taking what was left, but we made exact calculations, and said this was the basis.

Q. When these companies were separate companies they had different leakages, different unaccounted for?

A. That is right.

Q. It was not uniform?

A. No.

Q. And has there been any effort made by the complainant company to investigate the leakage of gas in the City of New York?

A. Investigate in what way?

Q. Have you employed any expert or consulted any expert to find out why you were losing as much gas as you were in the streets of New York?

A. I don't know any experts that know as much about it as we do. If you can find any experts that 15602
know more about it than we do we would try to get them.

Q. I asked you a question—

The Master: Have you employed any outside experts?

The Witness: Absolutely not.

Q. You are speaking about this, do you know whether there have been any experts consulted by the company without your being brought into the conference?

A. I don't believe they have; and I am quite sure it is not necessary.

Q. Will you say that it has not been discussed in 15603
conference between the officers of the company and engineers, the question of the leakage of gas in this city?

Mr. Ransom: I object to that as immaterial.

The Master: I will allow that.

A. Why, yes, we discuss unaccounted for gas, and if there are variations we try to locate a reason for it. I don't think you will find any condition in the country—

Mr. O'Brien: I move to strike that out as a voluntary statement.

The Master: Motion granted.

Q. Has that question, confining yourself to the last three years, has that question come up in the councils of the company at which you have been present?

Mr. Ransom: I object to the question. What does he mean, unaccounted for gas in this city—does he mean as to this company or as to what company?

The Master: Has the question of excessive
15605 leakage in the mains of this company or its allied companies, or subordinate companies, or any other company, been the subject of discussion in the last three years?

The Witness: It has not.

Mr. Ransom: I object to your Honor's question. It assumes that there was an excessive leakage. On the contrary this company and this system has been surprisingly low.

Q. Have you made a record of the explosions, gas explosions in the sewers of the City of New York?

Mr. Ransom: I object to the question.

The Master: I will allow it.

15606 Mr. Ransom: What kind of gas does he mean?

The Master: I don't know. Have you made a record of any gas explosions?

The Witness: We have a record, your Honor, of gasoline explosions. We have explosions in sewers as a result of these garages who run gasoline into the sewers, and somebody comes along and drops a match in, and we have an explosion, and they send for the emergency wagon to find the trouble, and we usually find gasoline in the sewers, and we go around to the garages in the neighborhood and tell them to stop running gasoline into the sewers.

Q. Do you ever have breakage of mains?

A. Yes.

Q. How frequently?

A. I would not undertake to say. In winter time with a heavy frost—

Q. I am asking you to tell me facts, not what would be, or what may be, but tell me the facts.

Mr. Ransom: I object to the comments of counsel. The witness was telling facts, and was starting to tell him facts about the winter when such breakages do occur.

Mr. O'Brien: He is getting into that Utopia 15608
that he is talking about.

The Master: Do you have broken mains once in a while?

The Witness: Yes, sir.

Q. How frequently have you had breakages of mains in the last fifteen years?

A. I would not like to say.

Q. Have you got a special record of the breakages of mains?

A. We have.

Q. Is there any particular book in which the record of the breakages of mains would be found?

A. No, I don't think so. 15609

Q. There isn't any particular description made in the reports of repairs to mains?

A. No.

Q. Covering breakages of mains?

A. No. We record a broken main, broken service, whatever the complaint might have been.

Q. Well, isn't that what the repairs to mains come from usually?

A. Oh, there would be that, or the settlement as the result of putting in a sewer, or settling ground, which may cause a leak. And water mains—

15610 George E. Woods, Cross.

The Master: Water mains break and wash the earth down?

The Witness: Water mains break and carry our mains away with it.

The Master: A dozen other reasons.

The Witness: Subway construction, where it would settle, and we have got to overhaul.

Q. Have you made any calculation of the approximate amount of gas lost that way?

A. We have not.

Q. The meter reading done by the various com-
15611 panies, the complainant company and the allied companies, is done from day to day, running all the way through the month?

The Master: How do you mean?

Mr. O'Brien: The meter readings throughout each day, you know.

The Master: They don't read each meter each day. The meter readers are out on the job all the time, is that what you mean.

Mr. O'Brien: There is no fixed time for all consumers' bills; they run along through the month.

The Master: I think we may take judicial no-
15612 tice of that. The meter readings are taken from month to month, depending on when the gas was turned on for a particular customer. Is that right?

The Witness: That is right.

The Master: You don't have it taken from the first of the month, to the first of the following month; it is not uniform in that way?

The Witness: No.

The Master: It dates from the time when various customers began to take gas?

The Witness: The meter readers are out every working day.

Q. They are out every working day for each company, and cover their territory, covering the entire territory of each company within the thirty days?

A. That is right.

Q. And the monthly bill of each consumer varies from thirty days to thirty days, according to the time that the index reader goes there?

The Master: It depends on the day of the month that the service was turned on, doesn't it. 15614

The Witness: He said it was something varying from time to time. Was that the question? The consumption varies—

Mr. Ransom: I wish to address the Court. I call your Honor's attention to the fact that the witness is now being interrogated regarding commercial department matters, regarding which I regard the witness as fully qualified, but as to which you have not yet permitted me to interrogate him.

The Master: Go on, next question. These side plays make me tired.

Q. Mr. Woods, the "gas sold" used in this computation is the total reading of the meters of the several companies involved for a given period, isn't it? 15615

A. That is right.

Q. Usually a year?

A. That is right.

Q. Or do you make that division more frequently?

The Master: I get your point, now get to it. How can you tell exactly how much gas is sold to consumers during any one calendar month.

15616 George E. Woods, Cross.

The Witness: You cannot, your Honor, and I tried to explain that the other day, when for eight months we have an unaccounted for of 3 1/4 per cent, which I said was in error, because on the down scale—because in other words, as the make goes down below the preceding month, we are getting a part of the sales of the previous month compared with the make of the following month, so that our sales in those cases might be almost as high as our make, and as soon as we get to August and start to go the
15617 other way, instead of having 3 1/4 per cent, it will run six or seven or eight or nine or ten or eleven, so that when we get to the end of the year the balance of the two will approximate six per cent.

The Master: But the fact remains that the exact amount of gas sold to consumers during any one month is not an absolutely metered, fixed, definite amount.

A. Absolutely not.

The Master: It is to some extent an estimate?

15618 The Witness: It can be estimated, dating back, et cetera, to the make.

Q. The gas used by the city is metered?

A. Right.

Q. I mean in public buildings?

A. Right.

Q. And how far back were the streets lighted, street lamps lighted?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. The matter of that calculation you have referred to, when it comes to the Astoria Company,

15619

you take there under the title of "gas sold," or "gas sales," the total quantity of gas sold to the complainant company?

A. The total quantity of gas sold, yes, to the complainant company.

Q. And do you work in there to the three per cent which covers the slow meters, condensation, difference in temperature, and whatever the additional element covering leakage in mains is?

A. The Astoria Company is treated as one of the gas plants of the Consolidated Company, as gas purchased—

15620

By the Master:

Q. Can't you answer that question? Is the same adjustment made with the Astoria as with the New Amsterdam or the Standard?

Q. Mr. O'Brien wants to know this: You have a transfer system. At the end of a month you charge or credit the Amsterdam, the Mutual and the other companies, with gas exchanged or transferred?

A. Yes.

Q. Is the same practice followed as to the Astoria Company?

A. To this extent, that the Consolidated buys all of the Astoria output.

15621

Q. Do you make the adjustment at the end of the month; does the Astoria bill you for gas which you get, or do you bill them for gas that they get from you, and do you make the same percentage or allowance for lost gases?

A. We do not; we bill them for the gas sold without this correction.

Q. Well, the Astoria Company bill you for gas sold to the Consolidated?

A. That is right.

15622 George E. Woods, Cross.

Q. Now, is there any adjustment for unaccounted for gas between the Consolidated and the Astoria?

A. There is not.

By Mr. O'Brien:

Q. In the Astoria Company's calculations of cost of manufacturing gas, is there any element of unaccounted for gas?

A. There is not.

Q. You are sure of that?

A. I am.

Q. Mr. Woods, where is the record kept, if a
15623 separate record is kept, of these computations of transferred gas?

A. I don't know that there is any special record kept. The accounting department of the Consolidated Gas Company—

Q. Isn't there any separate book in which that whole thing is set up?

A. If there is I don't know about it.

Q. Who turns in the reports on that: whose business is it now in the Consolidated Gas Company, to take care of those computations?

A. I really cannot say just the particular man. It is done in the accounting department.

15624 Q. Doesn't your department have anything to do with it?

A. No, we would not have anything to do with it. We would turn in the engineering reports of the amount of gas we made—

Q. You have to turn in those factors, don't you?

A. No. Having established the factors—

The Master: You have to turn in a report showing the send out?

The Witness: Yes, but then somebody else must send in a report as to the sales.

Q. Where is the clearing house where that information comes in?

A. In the accounting department. Who is it that handles it I cannot say.

Q. Is there any man in the engineering department that has charge of it before it gets to the accounting department?

A. No, because the engineering records are turned into the accounting department, from which they make up their account, in so far as the send out is concerned. They would get that from the engineering record. Then the engineering department, insofar as making a tabulation is concerned, is through with it. In addition to that they must get the gas 15626
sales from the different companies, the send out by the different companies. Haven't got this from all the companies, the Consolidated Gas Company acts as a clearing house, can go ahead and figure out—

Q. I am not asking you what they can do, but I am trying to get the name of the man that has charge of this, one man or two men?

A. I can't say.

Q. I want to subpoena them, and have them come down here.

A. I don't know who makes up the account, or I would tell you.

Q. How often are the accounts made up? 15627

A. Every month.

Q. Now, then, didn't you say a minute ago that this was done on an annual basis?

A. Annual and monthly. It is done on an annual basis, and monthly. Every month it is done. You asked me if it was done annually and I said yes, because it is done annually and monthly.

Q. The payment is made every month?

A. Absolutely.

Q. Between the different companies covering gas transferred?

15628 George E. Woods, Cross.

A. Absolutely.

Q. Are they estimates of what the result is going to be for the year?

A. No.

Q. Are you sure of that?

A. Absolutely.

Q. Does the Mutual, the Standard, the New Amsterdam, the Central Union, turn in a report to somebody in the Consolidated Gas Company every month showing the total send out?

A. No. They will send in—the Northern Union
15629 will record their sales, they will all record their sales and use, and then the engineering department will turn in the amount of gas sent out. They will do both.

Q. Then they do send in that?

A. Yes, they have both factors.

Q. In other words, every thirty days there is coming in from each one of the allied companies that sells gas and buys gas from the Consolidated Company, a report showing those two factors, their total send out for thirty days, their total gas sold and used for thirty days?

A. Yes, right.

Q. Each one of these allied companies that are en-
15630 gaged in that transferred gas business meter their gas used?

A. Right.

Q. They have meters in all their stations and every place where the gas is used by the company, to show the amount used?

A. Right.

Q. And they turn in some records to the company showing the amount sold to consumers?

A. Right.

Q. Do any of those companies furnish gas for street lamps?

A. It might be possible; I would not say, I would not like to say.

Q. Does the report coming in from the Central Union give you the figures for the Northern Union and the Westchester Lighting, or is it turned in just as one figure for the Central Union, or one report for the Central Union?

Mr. Ransom: I object to the question. It is an accounting department question.

The Master: I will allow the witness to state if he knows.

A. Yes, the Standard report their own, I think, and 15632
the Northern Union report their own, including the Westchester sales which they get.

Q. And are the figures showing the total send out of each of these three companies that I have last mentioned—do they include all of the send out of the Westchester Lighting Company, or only the send out of one of its stations?

A. I testified yesterday it included that part of Westchester County which is in New York City.

Mr. Ransom: You don't mean part of Westchester County?

The Witness: Of the Westchester Lighting Company which is in New York City. 15633

Q. Do you know that they do send in only the amount of send outs to that territory within the city?

Mr. Ransom: I object to the question. If this question is meant to imply that any Westchester Lighting gas comes into the City of New York, there is not and there will not be a shred of evidence in this case to indicate any such thing. The witness testified definitely to the contrary. There is no Westchester Lighting gas sold within the City of New York.

Mr. O'Brien: Well, you are too suspicious.

15634 George E. Woods, Cross.

Mr. Ransom: Your questions are too vague.

Mr. O'Brien: There is nothing vague about that. There is a report sent in every month, according to this witness; that gives to somebody in the Consolidated Gas Company the two factors that they need to make out these bills for the gas that is transferred.

Mr. Ransom: That has nothing to do with the output of any plant of the Westchester Lighting Company.

Mr. O'Brien: The witness has said it has.

15635 Mr. Ransom: He said distinctly to the contrary.

Mr. O'Brien: I will put the question again, then.

Q. Mr. Woods, monthly the Central Union turns in their report that gives you the factors for this calculation?

A. Right.

Q. They give you their total send out?

A. Right.

Q. And they give you their total sales and used?

A. Right.

Q. And that is true to the Northern Union and the

15636 Westchester Lighting?

A. No, I think the Northern Union would include that part of the Westchester Lighting Company whose territory is in New York City.

Q. You recall my asking if it was separately stated and you said it was?

A. I think I said it was separately stated.

Q. And the Westchester Lighting, you cannot say at this time whether their total send out and their total sales and used covers any territory outside the city?

Mr. Ransom: I object to the question. He

has not said anything of the sort. Mr. O'Brien is deliberately trying to mess up this record. There is no evidence in the case, and there cannot be any evidence in the case indicating that any part of the territory within the City of New York is supplied with gas generated at any station of the Westchester Lighting Company, or that Westchester Lighting Company gas has anything to do with the gas transferred.

Q. Let us clear that up, Mr. Woods. Am I in error on that, on the question of the Westchester Lighting furnishing gas to a part of the City of New York? 15638

A. No, I said that the Northern Union was supplying that part of the Westchester Lighting Company whose territory is in the City of New York.

Mr. Ransom: A little strip of Westchester territory within New York City, which the Westchester Lighting Company cannot supply.

Q. When you say there is a part of the Westchester territory, what do you mean?

A. Part of the Westchester Lighting Company—

Q. Their domain?

A. Their domain, whose territory is in New York City.

Q. Now, when you say that do you mean that they 15639 have a distribution system, and they have services within the city, some services that are taken care of by the Northern Union?

A. No, I would not say that, they are being supplied with gas by the Northern Union in that particular section.

Mr. O'Brien: Now, Judge, I think I got that right after all.

Mr. Ransom: No Westchester Lighting Company gas generated in any station of the Westchester Company is or can be sold in the City of New York.

15640 George E. Woods, Cross.

Q. Mr. Woods, didn't you state yesterday that there was a station up in the Bronx belonging to the Westchester Lighting Company?

A. I did not.

Mr. Ransom: Why, absolutely not.

Mr. O'Brien: Well, Judge Ransom did.

Mr. Ransom: I certainly did not. There is a little strip of territory within the City of New York which is the Westchester territory of the Westchester Lighting Company, being the so-called little annexed territory up there, where gas

15641 generated by the Westchester Lighting Company, under the requirements of the Public Service Commission for the Second District, is not of the required candle power. Consequently it cannot be sold within the City of New York. Gas within this annexed territory, this little strip of territory, is supplied to these consumers by the Northern Union Company from gas generated within the City of New York. There is no Westchester Lighting Company gas that comes into the City of New York.

Mr. O'Brien: Do you rest on that?

Mr. Ransom: I could. The witness so testi-

15642 fied.

Mr. O'Brien: I am going to ask the witness a question to clinch that both ways.

Q. Mr. Woods, state definitely if you know whether there is any gas furnished to the Westchester Lighting Company out of the City of New York?

A. I testified yesterday there have been times in emergency cases that we have delivered some gas into Westchester County.

Q. Yes, but only on rare occasions?

A. On rare occasions.

Mr. Ransom: Three occasions, he said.

Mr. O'Brien: Three in a lifetime, was it?

The Master: Objection sustained. I have let you gentlemen talk to each other for fifteen minutes just to see how far you would go. Stop it. Next question.

Q. The total send out then turned in by the Central Union and the Northern Union and the Westchester Lighting covers all the territory in the Bronx?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Q. Do you know or have you seen the reports of the total send out?

The Master: Objection sustained. 15644

Mr. O'Brien: I want to finish my question.

The Master: Ask another one and finish it.

Q. Mr. Woods, have you seen at any time these reports that come in from the Central Union, Northern Union, and Westchester Lighting Companies, the total send out, and the total sold and used?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you in your official capacity ever go over the reports that are turned in monthly giving the factors for this calculation for each of the companies?

Mr. Ransom: Objected to. 15645

The Master: Objection sustained.

Q. Do you know whether the determination of the sold and used that comes in each month for the purpose of this calculation is fixed as of the same day in each month?

The Master: Objection sustained. I won't allow another question. You ask any question you want, and I will rule on it.

Q. Mr. Woods, if any witness in this case has testified that the amount due for transferred gas—the calculation of the amount due for transferred gas is

estimated ahead of time for the purposes of bookkeeping, would it be incorrect?

Mr. Ransom: I object.

The Master: Objection sustained.

Q. Have, in any of these cases where calculations have been made, the estimates been taken of a future send out?

Mr. Ransom: Objection.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Have you always had before you in making your
15647 calculations of gas transferred in accordance with the system you have described, the total send out, actual send out?

The Master: Objection sustained.

Q. (Continuing.) Over a past period, and total sales and used over a past period?

The Master: Objection sustained.

Mr. O'Brien: Well, I assume your Honor has made that ruling on the theory it has been already answered.

The Master: Yes, already covered. The subject has been sufficiently covered.

Mr. O'Brien: I am trying to clear that up, so
15648 there won't be any question after we have once left it.

The Master: I don't want any further question.

Mr. O'Brien: I don't want the witness coming back afterward and saying, "As to a certain time we have estimated that."

The Master: I don't care what he comes back to say. I won't allow any further questions. The subject is exhausted.

Q. Mr. Woods, who takes charge of the placing of meters in consumers' premises?

A. Who has charge of that?

Q. Yes.

A. Mr. Turner.

The Master: Who?

A. Mr. Turner.

Q. Why do they usually put them up near the ceilings of the kitchens of the houses where they are placed?

A. Well, those are usually the contractors who do that. Mr. Turner just has the meters sent. He is not consulted by the architects or the people as to where they shall put them. 15650

The Master: Well, is there any point about putting them higher in the room to get a better result from the meter?

The Witness: No; I think it is just to get them out of the way.

The Master: Or is it just to get them out of the way?

The Witness: To get them out of the way.

Mr. Ransom: Where the children cannot play with them.

Q. Mr. Woods, referring to Exhibit 351, where you have made a comparison of hourly rates of week day wages paid by the complainant at its 21st and 99th Streets water gas plants, were these figures taken directly from the manufacturing books of those two stations? 15651

A. No, not at all.

Q. Taken from the pay rolls?

A. Pay roll or time books.

Q. Were they taken from the pay rolls in the office?

A. No, they were taken from the plant pay rolls or plant time books.

Q. In each instance?

A. Yes.

15652 George E. Woods, Cross.

Q. So that if we begin with the year 1906, and take up the other years on this exhibit, we might find, for the two months that you have selected, the exact number of men that are given here?

A. That is right.

Q. For 1906, to illustrate, 142 men on gas production?

A. Yes.

Q. Will be the sum total of the two numbers shown in the 99th Street plant and the 21st Street plant?

A. Yes.

15653 Q. You do not recall just what the divisions are between those two stations?

A. No.

Q. Why didn't you set those up separately?

A. Well, the only purpose of that exhibit, as I understood it, Mr. O'Brien, was simply for the purpose of showing the rates of pay that we were paying now and paying back as of that time. I personally took the pay rolls and the time books and went down them, and had the ratings called off of the men, the classification and their rates of pay, and from the classification as to what they were doing, I classified it without looking at any other classifications, and as to

15654 what it was. I believed these men were doing this kind of work, and went down not so much to see what was in gas production or anything else, but simply to indicate that our rates of pay had increased very materially from 1906 up until the present time. The men have absolutely—in so far as I was concerned, it did not make a particle of difference whether there were any men appearing there at all; I only tried to indicate what our rates of pay were. That was my version of that exhibit.

Q. You were not concerned so much with the distribution of the men?

A. No.

Q. As you were to just reflect the difference in wages in one period and another?

A. Yes. I recapitulated there at the bottom simply to get the number of men, in order to get an average of what the average rate per hour was. It did not make a particle of difference when we took it or how we took it; I only used the men for getting the average rate of pay.

Q. Well, could not we exclude this from the case, and simply put on the record your belief, based upon your observation of the records of the company, that 15656 there had been increases in wages between 1906 and 1919?

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. You mean it is not precise, so far as the distribution of labor is concerned; your only purpose was to show the variations in the rate?

A. Absolutely; that was my purpose.

Q. It was not intended to indicate that a certain number of men would be required for gas production, and a certain number for repair labor, and a certain number for handling material, and a certain 15657 number for the miscellaneous labor, and so on?

A. It was not meant for that at all.

The Master: Not on that exhibit?

The Witness: Not on that exhibit.

The Master: It is another exhibit, I think?

The Witness: It simply took the wage variation and put it down irrespective of the make or anything else, absolutely intended only, insofar as my view of the exhibit was, to show the rates we were paying as of that time and as of now.

15658 George E. Woods, Cross.

Q. Well, now, did the time books show the wage?

A. They would show the rate per hour, yes.

Q. And did you have before you the time books for January, 1906?

A. Yes, I had the time book—pay roll—I am not sure whether it was a works pay roll or a time book, as of that time. I had them all in my office.

Q. Is that up there now in your office?

A. No, I do not think so.

Q. Who has it?

A. I think it is over at the plant.

15659 Q. It is not a very big book, is it?

A. No, not particularly.

Q. You could have brought it down here in your pocket?

A. It could have been brought down. I do not think I could carry it in my pocket, no.

Q. Do you know who has it?

A. Do you refer now to the 99th or 21st Street?

Q. I am talking now about 1906?

A. As I say 1906, I am not quite sure now whether it was on a pay roll at the works or the time book, because some were in time books and some were in pay rolls that they had there.

15660 Q. Have you got preserved in the works at 99th Street and 21st Street the pay rolls for 1906?

A. I think so.

Q. Either that or the time books?

A. Yes.

Q. Can you say positively whether that was a pay roll or a time book you saw?

A. I am not sure whether it was a pay roll or time book.

Q. Did they bring that to you at the office or did you go to 99th Street and 21st Street and get it?

A. It was brought to my office.

Q. Mr. De Castro brought it from the 99th Street plant?

A. No. Mr. De Castro was in the hospital.

Q. His clerk?

A. The assistant up there.

Q. Who brought it down from 21st Street?

A. I don't know, but I think the superintendent brought it over, the superintendent or the chief clerk. I had them both over there.

Q. Well, now, is your memory any better as to the other years that are shown, 1914, '17, '18 and '19?

A. No better except that they came from a time 15662
book or a pay roll, and I think in the latter years it may have been the time book. I made that up some time ago.

Q. How long ago?

A. It was a month ago.

Q. Well, you don't know whether those years the time books or the pay rolls that you used are up in the office still?

A. I do not think they are in the office. I think whatever I had went back to the works.

Q. Gone back to the works?

A. I think so.

Mr. O'Brien: Mr. Ransom, will you arrange 15663
to have those accessible in the office?

Mr. Ransom: We will arrange to have them accessible to you, the same as the others have been, and the same as these have been.

Mr. O'Brien: No.

Mr. Ransom: I don't know whether you have seen these particular ones yet or not. If you have not and will designate any time, they will be produced.

Mr. O'Brien: I will present here tomorrow an affidavit of Dr. Bemis as to his experience.

15664 George E. Woods, Cross.

He went back after your Honor had made direction, and there is time being consumed in keeping him waiting, and when you hear the story of Mr. Frank and all the others and their experience in an effort to get books, you will see there is anything but a frank disclosure.

Mr. Ransom: When do you want them?

Q. Who suggested to you to combine 99th Street and 21st Street in one figure?

A. Nobody.

Q. Who suggested to you to leave out the years be-
15665 tween 1906 and 1914?

Mr. Ransom: I object to this line of inquiry. The exhibit speaks for itself.

The Master: I will allow it.

Mr. Ransom: Of course, 99th Street and 21st Street are combined; there is no difference.

The Master: No, but Mr. O'Brien asks why he left out from 1906 to 1914, whether anybody suggested that he should, and I will take his answer.

The Witness: I think counsel said something about it, didn't they? They did not think those years of any consequence.

15666 The Master: Well, was that a—did the number of men run along uniformly?

A. Oh, yes. It would depend on the make, Mr. O'Brien, the time of year and so forth.

Q. Well, now, looking back over the period from 1919 to 1906, did the send out of the 21st Street station vary during the year?

A. During the year?

Q. From year to year?

A. Well, it varied from time to time. Probably in 1906 they were making less per year than they are making now.

Q. Much less?

A. Well, I would not say. I am only making a sort of a guess at that. It may have been ten or fifteen per cent less.

Q. How about 99th Street, could you say what the output was from year to year?

A. I can approximate it. I do not think there would be much difference in 99th Street.

Q. You think it ran along rather uniformly?

A. I do not think there would be much difference.

Q. Well, looking back over the same period, has there been much variation in the amount of gas transferred from the allied companies? 15668

Mr. Ransom: Objected to as immaterial, it has been fully covered.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I am testing this witness.

The Master: I do not think it is necessary.

Q. What change in the output of those two stations followed the opening of the plant at Astoria?

Mr. Ransom: Objected to as not bearing on the matter now under inquiry, does not affect the rates of hourly pay at these two plants.

The Master: I will allow it. 15669

Mr. Ransom: Exception.

A. I don't think it made any material difference. There probably was a slight reduction at the moment because we had another plant in operation. It probably would affect it at some time.

Q. The men employed in 1906 were not on an hourly basis?

A. No, I believe the rates of pay were rates per day, at that time, as indicated on the pay roll.

Q. And the gas makers got how much at that time?

A. I did not get the question.

15670 George E. Woods, Cross.

Q. How much did the gas makers get at that time?

The Master: What time?

Mr. O'Brien: 1906.

A. I do not recall the figure. Whatever is there. They were working twelve hours. If it was 25 cents an hour, they were getting $3 a day.

Q. There is no figure here. I am asking you now just to tell me from your memory. Don't you remember what a gas maker was getting at that time?

A. I think $3 a day for 12 hours' work. I am not sure. It has been a long time ago.

15671 Q. Gas makers' helpers were getting what?

A. I do not remember now.

Q. Laborers were getting what?

A. I think about $1.50 a day for ten hours' work.

Q. Can you not tell us as to all of the classes that were engaged in the gas production, at least that you have grouped under gas production here?

A. Well, I probably can. I simply went down the pay rolls here.

Q. I mean without refreshing your memory.

A. No, I could not, Mr. O'Brien.

Q. Just a minute, Mr. Woods, before you look at the paper.

15672 A. I said I could not.

Q. Before looking at that paper I will ask you some more questions to see what you know about this without using the paper that counsel has handed to you.

Mr. Ransom: Referring to one of the exhibits already in evidence.

Mr. O'Brien: Not in evidence.

Mr. Ransom: Well, it has been identified at least.

Mr. O'Brien: I do not want a man to come in here with a primer; I want to find out what this $13,000 man knows about his business.

Mr. Ransom: Well, he knows much more than $13,000 worth.

Q. Can you give me the classes of labor that are included under the other headings on this exhibit—repair labor, handling materials, miscellaneous labor, indexers, governor house men, watchmen?

Mr. Ransom: I suggest that the witness has a right to refresh his recollection if he wishes.

The Master: Right.

Mr. O'Brien: That can come later after I find out that his memory has got to be refreshed.

The Master: That is likewise correct. 15674

Q. Can you say that as to any of those groups?

A. Yes, I can itemize some. I do not know whether I can itemize every particular one.

Q. Itemize them now. What is repair labor made up of?

A. Tinsmiths, helpers, machinists.

Q. Have you said all under that group?

A. That practically covers them fairly well.

Q. That is enough, you mean?

A. I have left out a few.

Q. Quite enough, is it?

Mr. Ransom: I object to the question.

Q. You may have left out some, you say, Mr. 15675
Woods?

A. Possibly.

Q. Now, under handling material?

Mr. Ransom: I object to the question as already covered on cross-examination. The various elements making up each of these classifications was exhaustively gone into by Mr. Chambers.

The Master: I am afraid that is so.

Mr. O'Brien: It is hard to avoid overlapping something of Mr. Chambers. I have my own

way of handling this, and there were points not brought out by Mr. Chambers' cross-examination, your Honor. I will try not to needlessly cover ground that was gone over, but there are certain things I want to establish. I will do it as briefly as I can.

The Master: I will allow this question.

A. What was the question?

Q. Now, under handling material?

A. Well, there were laborers and engineers—

The Master: I am going to sustain the objec-

15677 tion. It has been fully covered.

The Witness: I went through all of that.

Mr. Ransom: Yes.

The Master: It has been fully covered.

Q. Mr. Woods, the manufacturing books of the 99th Street Station and 21st Street station will give you the same totals, if your exhibit is correct, of labor at the works, that you have here in this exhibit?

A. They would not.

Q. Why not?

Q. Because it is not in there to that extent.

Q. Does not the manufacturing book in each station show the total labor?

15678 A. It does not.

Q. It shows hours of labor, does it not?

A. It does not.

Q. It shows the equivalent, does it not?

A. Oh, on some particular work it might show how many men were in the boiler house, how many men in the generator house. It does not indicate by any means the number of men we had employed at the plant.

Q. Will you take the manufacturing books of the 99th Street station and see if that refreshes your memory as to the number of men employed in 1916 at the works (handing book to witness)?

A. They have a number of men down here, but it does not represent the number of men employed by any means.

Q. You mean that it is not a complete record?

A. That is right.

Q. Why was it kept?

A. Only as a blotter for the man's guidance as to how many boilers he might be running, how many generators he might be running, whether he was doing some work in the purifying house, or whether he was handling some material at that particular time. Half of the items are not in here at all. 15680

Q. It has a column that is entitled, "Number of days labor employed," has it not?

A. Yes.

Q. And they are distributed into boiler house labor, generator house labor, purifying house labor and handling?

A. Yes.

Q. Then it gives you the total?

A. The total of those particular items as to those particular buildings.

Q. Then it gives you the gas made per day's labor?

A. Yes, on that kind of work.

Q. What class of labor is not included in this book? 15681

A. Well, in the first place there are no engine attendants in here at all.

Q. What engines do you refer to?

A. The men in the exhauster and blower houses. There are none whatever. There are no repair men indicated in any way in what is here. This is only a sort of perfunctory means or a blotter for the superintendent, to indicate just about the work that is going on, the number of machines that he has running, and has no reference to the pay roll in any—has no reference to the pay rolls on which we have the record, on

15682 George E. Woods, Cross.

which the men are paid, which would not coincide with this day's labor in any way.

Q. You have not produced the time books here, have you?

Mr. Ransom: I object to the question.

The Master: I will allow [illegible]

Mr. Ransom: This witness does not produce anything.

A. No.

Q. You have not any record which is a replica of the time books, have you?

15683 The Master: With you?

Q. With you?

A. No.

Q. A manufacturing book is in every works of every gas house of the country, is it not?

A. Some sort of a record.

Q. That kind of a book is used by every gas company that you have ever been connected with, has it not?

A. This book, with modifications.

Q. It is made the basis of the monthly reports of each works office?

A. Not in so far as labor is concerned, absolutely

15684 nothing; only in so far as quantities are concerned.

Q. You mean to say it is unreliable as to labor?

A. I do. I do not say it is unreliable, but it does not include the labor.

Q. What?

A. It does include the labor employed at the plant.

Q. Then it is incomplete?

A. It is incomplete, yes.

Q. Then anybody who assumes [illegible] represents the total labor would be misled?

A. He would, absolutely.

Q. And he would be confused?

A. Absolutely.

Q. And if he made computations on it, those computations would be unreliable?

A. They would be worthless.

Q. Now, will you turn to January of 1916? Well, you have not got this on this exhibit. Why did you leave out 1916?

Mr. Ransom: I object to the question. It has already been covered.

The Master: I will allow it.

Mr. O'Brien: They left that out, too, your Honor—1916.

The Master: I will allow it. Why did you 15686
leave out 1916?

The Witness: No particular reason. We put in 1914. At the commencement of the war, the conditions at about that time.

The Master: Then you jump to what?

Mr. O'Brien: 1917.

Q. Why did you leave out 1913?

A. No particular reason.

Q. Don't you know that labor was cheap in 1913?

A. Well, if it had been cheap the comparison would have been just the same, Mr. O'Brien.

Q. Answer the question and do not say "if." Answer the question: Don't you know that? 15687

A. I do not remember.

Mr. Ransom: I object to the question as immaterial. Of course, if labor was lower in 1913, why, the percentage of increase would have been greater, and they would have made a great complaint about it.

Q. Did counsel tell you what years to pick out?

A. Not that I recall.

Q. Did Mr. Carter tell you the years to pick out?

A. He did not.

Q. Did Mr. Goetz tell you?

A. He did not.

Q. Mr. Davidson?

Mr. Ransom: I object to the question as quite immaterial.

The Master: I will allow it.

Mr. O'Brien: Your Honor, I think we could save a lot of cross-examination if they withdrew this exhibit.

Mr. Ransom: It is a perfectly good exhibit.

Q. Mr. Woods, a monthly report is turned in of manufacture?

A. Right.

15689 Q. It gives what, in various columns? Have you got a sample with you?

A. I have not.

Q. Well, it is a form that has been used uniformly for a number of years?

A. Quite a long time, yes.

Q. And it gives you the daily registered make?

A. I think it does, yes.

Q. The corrected make?

A. I think it does, yes. It gives you that.

Q. And it includes many of the columns in this book?

A. Yes, it gives the quantities used of coal and oil.

15690 Q. And it gives the hours of labor per thousand cubic feet?

A. I do not think so, Mr. O'Brien. I am not quite sure.

Q. It gives information on labor, does it not?

A. I am not sure that it does. I would not say positively now, because I am not quite sure. I do not think there is anything on labor about it.

Q. You have used the same form of book to 1905, have you not, substantially?

A. I do not know. It might have been 1907 or 1908 or 1909. I have forgotten when it was put into use.

Q. Just specify the classes of labor that are not covered by the manufacturing books. You have mentioned one or two?

A. I say there is none of the repair department in here at all; nothing in connection with that. There is nothing in here of the governor house men or index men.

Q. Just say what they are, Mr. Woods, so I will have it right and will not be bothering over things that are not necessarily controvertible. It does not, you say, include the repair men?

A. None of the repair men, none for handling spent material for looking after the drips, looking after the tar tanks and separators. It does not indicate any men in the engine rooms at all. It shows the boilers, and that is the only item it does show—the actual generator house runners and fire cleaners, the man in the generator house, if there is a man in the boiler house, or two or three men, there are some indicated; and there are many things going on which are not indicated there at all. 15692

Q. Mr. Woods, this is kept with minute detail, the manufacturing book?

A. Insofar as material is concerned for the purpose of making up the monthly statement as to materials and quantities, for the month, they are correct. 15693

Q. It has the detail of coal used and the detail of candle power. Is that unreliable, the record of candle power here?

A. So far as our records of candle power are concerned, they are reliable.

Q. You would bank on that, would you?

A. I would.

Q. And we can make computations from what is set forth here as to the showing of the candle power at the time of the tests at the works?

A. Right.

15694 George E. Woods, Cross.

Q. We can make computations that are reliable?

A. Right.

Q. And you will accept them as the results of that station at that time?

Mr. Ransom: I object to the question.

The Master: I will not let him say that—whether he will accept your statements.

Mr. O'Brien: No, whether he will accept the statements in his own books as reliable on the question of candle power tests, your Honor. Don't you see we have right here the answer to

15695 his hypothetical exhibit? We have got the answer here as to what the candle power was—how many gallons of oil they say they used to produce 22 candle power.

Mr. Ransom: At what plant?

The Master: Let us get this on the record.

By the Master:

Q. This manufacturing book is ruled off into various columns. The pages that we now have before us are headed, "Daily record of manufacture of the 99th Street station, Consolidated Gas Company, during the month of January, 1916." Is that correct?

A. Right.

15696 Q. That is ruled off in various columns, the first one being the date, and that is subdivided into two columns, one being the numeral for the date and the other one the day of the week. Then comes another subdivision, "Indexes of station meters," the first one Meter No. 1, Meter No. 2, Meter No. 3, and so on. Over the printed matter "Meter No. 1" there are a number of figures. What does that mean? Does that mean the last meter was prior to the first of January, 1916?

A. Yes, that was probably the preceding index of the previous day.

Q. The index of the day immediately preceding?

A. I do not know what that figure is. It would not be the previous index to this—yes, "491," that would be the previous day.

Q. The next subdivision seems to be in three columns, the heading being "Gas Mains," the first column being "Registered Make," next "Temperature," and "Corrected Make." Does that show the amount of make on that day?

A. That is right.

Q. The amount as registered?

A. That is right.

Q. Where? 15698

A. At the station.

Q. Then the next subdivision seems to be "Received"—

Mr. Ransom: That is the temperature of the registered make, is it not?

The Witness: That is right.

Q. And the corrected make is as you have already described?

A. Corrected for temperature.

Q. Then the next subdivision is "Received from stations," and there are three stations there. What does that mean?

A. There have been times they indicated the 15699
amounts on some of the old records that were kept, your Honor, where gas had been transferred from one station to another and was put down.

By Mr. O'Brien:

Q. When did you stop that practice of keeping your transferred gas in this book?

A. Oh, I don't know, Mr. O'Brien. I could not tell you.

Q. It is some years back, is it?

A. I should think so. I should think it was some years back.

15700 George E. Woods, Cross.

By the Master:

Q. The next column is, "Sent out to consumers," and that gives the amount registered on your meters as having been sent out?

A. That would give the amount, but the difference would depend on the amount of gas on hand. It would be 13,757,000 on hand, your Honor, which would be the whole of the stations, 99th Street, 111th Street and 132nd Street, the gas on hand of those three stations.

Q. I am talking about the send-out column?

15701 A. Yes. The difference between the on-hand would be plus or minus the make, to give you the—for instance, here on the day before they had 13,296,000 on hand. They said they had 13,757,000 which indicated that they had on hand some four hundred and fifty odd thousand more on one day than the other, and it was deducted from the make, the record make of 3,872 to consumers 3,411, because they had a greater stock on hand.

Q. The next subdivision is, "Sent to stations" with three stations apparently blank, and then "On hand 7 A. M."?

A. Right.

15702 Q. Is that when the figures are taken, seven A. M.?

A As a matter of daily record it is put down as seven A. M., but the record is taken every hour.

Q. The next is "illuminating power, etc.," and that seems to be divided?

A. Yes.

Q. It is first divided into candle power, candles per gallon, analysis, and specific gravity?

A. Right.

Q. The candle power column is divided into "Works Tests, Company's Test, 79th Street, Company's Test blank, and City Test." Is that correct?

A. Right.

Q. The "Works Test" represents what somebody at the works has tested the gas at?

A. Right.

Q. The company's test at 79th Street is not filled in every day, apparently, is it?

A. Apparently some days they did not get the test.

Q. Then the company's test somewhere else is wherever it happens to be, I suppose?

A. Right.

Q. The city's test you fill in there. Where do you 15704
get that from?

A. The city's test we do not know anything about except from the postal card which says that they made the test. We simply get the statement from them.

Q. But you enter on here what the city says they tested, according to those postal cards?

A. Yes; we know nothing about it.

Q. Then it is divided into "Works, Company's 79th Street, Company's blank, and City"?

A. That is simply an efficient figure for the superintendent's use.

Q. What does 5.97 under "Works" mean? 15705

A. That would be 5.97 candles for every gallon of oil used.

Q. What has the city got to do with that?

A. Nothing at all.

Q. Is this figured on the city's test?

A. Applying it on the city's test.

Mr. O'Brien: It is based on the city's test, that column.

Q. Figured on the city's test, that is what would make that candle power efficiency?

A. That is that column.

15706 George E. Woods, Cross.

Q. What is the next column?

A. The CO_2 is carbon dioxide, and 3.2 per cent.

Q. What is this (indicating)?

A. 11.8 per cent of aluminum.

Q. Then you have another column headed "Manufacturing Averages"?

A. Right.

Q. Which is again subdivided into "Materials per Thousand"?

A. Yes.

Q. That is again subdivided into "Oil, Generator
15707 Fuel, Boiler Fuel"?

A. Right.

Q. Who makes the entries in these various columns?

A. Those are made by the clerks.

By Mr. O'Brien:

Q. In the works' office?

A. Right.

Q. Under the supervision of the superintendent?

A. Right.

By the Master:

Q. In the oil column you enter the number of gallons used?

15708 A. The gallons of oil per thousand.

Q. Then under generator fuel there is coal and coke, and that shows the pounds used?

A. The pounds of coal and coke.

Q. And the total in pounds?

A. Right.

Q. And the boiler fuel, solid, liquid and total?

A. Right.

Q. Solid means what?

A. Solid would mean coal, liquid would be tar or anything of that sort.

Q. An extra column is headed "Water," and it is subdivided into two columns.

Mr. O'Brien: That is expressed in terms of pounds?

The Witness: Pounds.

Q. "Water" is divided into two columns, "Water Used" and "Evaporated," and the "Total Used" is divided into "Cubic Feet" and "Per Thousand." What does that mean?

A. That would mean they used that number of cubic feet and this number of cubic feet per thousand (indicating). 2.31 cubic feet per thousand of gas made.

Q. Then the "Evaporated" has two columns, 15710
"Cubic Feet" and "Pounds evaporated, Pounds Fuel from 212°." What is that?

A. That is to determine the efficiency of the fuel. In other words it was 6.47 for every pound of coal used.

Mr. Ransom: In making water gas.

Q. Then the next subdivision seems to be "Oil Accounts." That seems to be divided into two general subdivisions, "Gas Oil" and " Oil." The " Oil" section seems to be entirely blank. Now, the gas oil subdivision is again subdivided into "barge number, gravity, gallons received, gallons used, gallons on hand."

A. Right. 15711

Q. Under "Barge Number," that means what the barge number was on which the oil came?

A. Yes, barge No. 4.

Q. And what does the gravity mean?

A. 33 degrees Beaume.

Mr. O'Brien: Well, it is blank all the way down from that January 2nd, isn't it?

Mr. Ransom: Whenever they are received.

Q. In "Gallons Received" the amount entered there is the amount of that shipment?

A. Right.

Q. Not the amount used in a particular day's work?

A. No, that is the gallons received, your Honor.

Q. The gallons used would indicate the amount that was used that day?

A. Right.

Q. Out of that shipment?

A. Right.

Q. If it all goes into the tank together, how can you tell?

A. It may not be out of that shipment. It may be

15713 out of the stock we had on hand.

Q. The gallons on hand showed what is left after what you have used and stopped?

A. That is right.

Q. So in the " Oil" column, if it is some other kind of oil, you make a similar entry there?

A. Right.

Q. And under "Barge Number" and "Gallons Received" and "Gallons On Hand"?

A. Right.

Q. What is this column here that does not seem to have a heading, with figures in it?

A. I do not know.

15714 Mr. O'Brien: You do not know what that is Mr. Woods?

The Witness: No, I do not look at this every week or every month.

Q. The next general subdivision is "Fuel Accounts." That is again subdivided into "Generator Fuel Used," "Boiler Fuel Used," "Total Solid Fuel Used." Now, "Generator Fuel Used," is again subdivided into "Coal Pounds," then a blank column, then "Coke Pounds," and then what is this "Gen in Use"?

A. Generators in use.

Q. Does that show the amount of coal that was used that day?

A. That would give you the pounds.

Q. That shows the amount of coke used that day?

A. Yes.

Q. And the number of generators that were using it?

A. Right.

Q. Then you have "Boiler Fuel Used," divided into a column, "Anthracite, Pea, Buckwheat, Slag Pounds." What is this coke screenings, coke pounds, coke breeze pounds, total solid fuel pounds, tar burned 15716
pounds, boiler fuel in use? Under "Coal Pounds" you give the amount of coal you used that day, under "Anthracite, etc.," the amount of that kind of coal used that day?

A. Right.

Q. The amount of buckwheat used that day and so on across?

A. Right.

Q. Giving the amount of fuel used?

A. Right.

Q. And the number of boilers that were using it?

A. Right.

Q. Then there is a subdivision, "Total Amount 15717
Used Coke in Pounds," and "Coal and Breeze Pounds," and that subdivides the coal and coke into pounds, showing the different amounts used?

A. Right.

Q. The next one is "Residual Account Tar," divided into columns of "Gallons Made," "Gallons Used," "Gallons Sold," "Gallons on Hand," "Gallons Made per Thousand," "Reduction per cent of Oil Used," "Gravity of Tar"?

A. Right.

Q. In each of these columns is entered information under the appropriate headings?

A. Right.

Q. And under "Oxide Account" in three columns, the "Received," "Used" and "On Hand"?

A. Right.

Q. The entries appearing there would indicate quantities under those appropriate headings?

A. That is right.

Q. Then you would have coal, coke and breeze accounts divided into three general accounts, generator and boiler coal, coke and breeze, in red?

A. Right.

15719 Q. The subdivision "Generator and Boiler Coal" is again subdivided into "Name of Coal" column, the next one is for coke, the next one tons received, the next one generator coal received tons, the next one boiler coal used tons, the next one tons generator coal on hand, the next one tons boiler coal on hand, and the entries are made there of the coal received and what is taken out?

A. Yes.

Q. That is sort of a stock account?

A. Yes.

Q. Then under "Coke" and "Breeze" in red you have "Pounds Received, Pounds Used, Pounds on

15720 Hand." That is a sort of stock account again?

A. Right.

Q. Then you have "Tank Pounds Fuel," "Coke Pounds," "Coal Pounds." What is tank pounds?

A. That would not apply to that station.

Q. Then we come to "Labor," and that is headed, "Number of Days Labor Employed"?

A. Right.

Q. That is divided into the columns, "Boiler Houses," "Generator House," "Purifier House," "Handling"?

A. Right.

Q. And under each of those headings is a number of men?

A. Right.

Q. That indicates the number of men employed that day in those houses?

A. To some extent, your Honor. That is, in a boiler house they have two, in the generator house, ten, the purifier house one, and handling four.

Q. That brings me back to the point where I interrupted Mr. O'Brien. Explain why it is that they put any figure down there if it is not a correct figure?

A. It is only a matter of a rate, your Honor, pre- 15722
paring a rate on boiler house fuel, generator house and purifier house, labor in handling, a rate of so much per thousand, which so far as use is concerned is of no practical value whatever. It is only for the use of the superintendent. We do not use it and it does not by any means or in any way indicate the labor employed.

Q. The next column is "Total," and it carries the total of these four items?

A. Right.

Q. The next column is "Gas Made per Day's Labor"?

A. Right. 15723

Q. And the items set forth there to the amount of gas made per day's labor?

A. Right.

Q. Do I understand you to say it is a useless procedure?

A. It only covers those particular items, but does not cover all the items, your Honor. Covering only those particular things.

Q. Then we have another column "weather, barometer" is it?

A. Yes.

15724 George E. Woods, Cross.

Q. Thermometer?

A. Right.

Q. A. M.

A. Right.

Q. And P. M.?

A. Right.

Q. The entries are made from the barometer and thermometer of the temperature there?

A. Right.

Q. Then the condition of the weather morning or afternoon, whether it is cloudy, rainy or clear?

15725 A. That is the idea.

Q. The next one is again "date" and the number of the month and the day of the week. I suppose that is in order that you do not have to look across to the other side of the page?

A. Right.

Q. Down below here I must call for some additional information; for instance, on this page you see "Gas meter for the works, No. 422,464, present index 932,900," last index figures given and "consumed" so much. What does that have reference to?

A. That is gas used by the company at that particular station, your Honor.

15726 Q. Then the next one is "gas metered for scale"?

A. Scale house.

Q. Giving the number of the meter, present index, last index and consumed?

A. Right.

Q. Then you have "Maximum Make and Minimum Make"; what does that mean?

A. That means it would be the maximum make.

Q. On one day?

A. On one day, and the minimum.

Q. Then it has "Maximum Sent Out" and "Minimum." That means on one day?

A. On one day.

Q. Then further on you have "drip oil, on hand last report," giving a figure, "purchased," giving a figure, "total," giving a figure "sold," giving a figure, "on hand," giving a figure?

A. Right.

Q. That is a sort of stock account of drip oil?

A. Right.

Q. Then you have "drip oil from 111th Street." What is this, December?

A. Apparently December.

Q. That is oil that came from 111th Street?

A. Oil that came from the 111th Street holder. 15728

By Mr. O'Brien:

Q. This particular book covers the period from January, 1916, to October, 1919, down to date?

A. I imagine it might, yes.

Q. And the books of this kind that have been in use by the company cover periods of about three years, they are built that way?

A. Yes, three or four years.

Q. Sufficient pages to cover three or four years?

A. Yes.

Q. And for a decade we would have perhaps three books, the history of the manufacturing results for a given station will cover about three of these 15729 books?

A. Probably.

Q. And the meter readings in the stations are taken off by the man who sits there?

A. It is taken off by a man.

Q. I am talking about the 99th Street station now. I am talking about the present time. There is one man in the meter house, isn't there?

A. Yes, sir.

Q. And only one man?

A. If they are running one man on a shift, yes.

15730 George E. Woods, Cross.

The Master: May I interrupt you, Mr. O'Brien? Do I understand you to say that your experience has been that you get 6 candle power out of a gallon of oil?

A. I say we will get six. It will run anywhere from 5.80 to 6.20. A fair average will be 6.

Mr. O'Brien: I want to say right here that I am assuming that these books are offered in evidence by the complainant, so there will not be any misunderstanding about it?

The Master: Yes.

15731 Mr. Ransom: Assuming what?

Mr. O'Brien: Over my objection, all these books. All these data underlying your records, underlying your accounts are in evidence over my objection?

The Master: Yes.

Mr. O'Brien: And with an exception to the defendants?

The Master: In other words, you are in substance, putting in in a short way all your records and books?

Mr. Ransom: Do I understand it to be your Honor's attitude that the underlying data are a

15732 part of the record?

The Master: Yes.

Mr. Ransom: When we put in an operating ledger we carry with it the data which underlies it?

The Master: Yes; that is why I am giving them permission to search through your books. Otherwise I would not do it.

Mr. O'Brien: Of course that will produce a little confusion on the record, but I will not take it up with you now.

The Master: It will only produce this confu-

sion, that nothing will be printed in the record that was not called directly to the Master's attention and was not considered by him. I had this book here and looked at it—

Mr. O'Brien: In other words, I am not bound by this, I am taking these as admissions against interest.

The Master: No, you are not bound by this.

Mr. Ransom: They are the company's record kept in the course of business. May the record show that the prior books for both 21st Street and 99th Street are in court pursuant to Mr. O'Brien's 15734 request?

The Master: Well, you have made the statement. I take it the stenographer has it.

Mr. O'Brien: Well, it is true. I used this book to refresh the witness's memory, and the questions I have already asked him and that I am going to ask him—

The Master: Don't concern yourself about the record. What we are trying to do is to find out what the fact is, and to get it without technical consideration.

Q. Now, going back to January, 1916, you have the meter readings on meters Nos. 1, 2, and 3 in the 99th 15735 Street station. You are acquainted with those meters?

A. Right.

Q. One of them is a proportional meter?

A. Right.

Q. And the other two are drum meters?

A. Right.

Q. And there is a man in charge there to read them?

A. Right.

Q. And that man answers the telephone?

A. He does.

15736 George E. Woods, Cross.

Q. And guards the gate in the brick wall by which entrance is made to the plant?

A. Yes.

Q. And operates the testing or photometric apparatus which is within the same building?

A. I am not quite sure whether he does or not.

The Master: How long does it take him to read those three meters?

The Witness: About a minute or a minute and a half. He has got to make some calculations.

Mr. O'Brien: I know what is in the Master's
15737 mind, but this is perfectly logical, and you will see the force of it when we come to it. He has set up here a hypothetical plant and figures, and I am going to test their accuracy, both the hypothetical and the concrete.

Q. Now, Mr. Woods, a proportional meter is not a reliable meter, is it?

A. The United States Government thinks so.

Q. Answer the question?

A. I do.

Q. Haven't you found that they get out of order?

A. Oh, yes.

Q. Frequently?

15738 A. Yes, and we have drum meters get out of order very frequently, too.

Q. Not so frequently as the proportional meter?

A. Well, it might not be quite so often.

Q. Are they not practically discredited in the gas making industry, proportional meters?

A. I never heard so.

Q. Would you compare a proportional meter with a Thomas meter?

A. I think they are better than a Thomas meter.

Q. You think they are?

A. Yes.

The Master: You see you don't get anywhere.

Mr. Ransom: Mr. O'Brien and the expert disagree, that is all.

The Master: You don't get anywhere.

Mr. O'Brien: We get here, the transferred gas depends on the send out, if these figures are not reliable in this book, then the whole case will fall to the ground. That is how important it is. If they have meters here that don't mean anything, and a proportional meter does a shimmy dance when it is out of order, then the figures are no good, the send out is no good, the averages 15740
on which they base the monthly reports are absolutely unreliable.

Mr. Ransom: But if it costs this company so much to make gas, as has been shown, it is immaterial how much gas is transferred.

Q. One of these three meters in this book is a proportional meter?

A. Yes.

Q. Will the proportional be known as No. 1, No. 2 or No. 3, you don't remember?

A. I do not recall.

Q. Now, you put down here the readings of each meter each day, and then you put down the readings 15741
the next day, and then you take over the differences in the three columns between the registered make of the day before, I mean the readings of the day before and the readings of the present day, and that total of the three differences gives you the readjusted make as of the day in question?

A. It should.

Q. And then you apply the formula that is used for reducing that readjusted make to terms of corrected make?

A. Right.

15742 George E. Woods, Cross.

Q. Terms of 60 degrees temperature?

A. Right.

Q. Now, the temperature given here in the manufacturing book is the actual temperature, isn't it?

A. Actual temperature of what?

Q. I am asking you?

Mr. Ransom: There are several temperatures given. Which column do you mean?

Q. In the column "gas made," where they have a temperature, what is that, Mr. Woods?

A. It is the temperature of the gas as it is being re-

15743 corded.

Q. So that for the first day of January, 1916, here, 74 would mean that that was the temperature of the gas?

A. At which the gas was going into the meters.

Q. Now, that is an average temperature, I assume?

A. Oh, yes.

Q. You take it every hour, don't you?

A. Right.

Q. Who has charge of that particular works?

A. The man who reads the meters.

Q. The man in the meter house?

A. Right.

15744 Q. And then you have the send out to the consumers?

A. Right.

Q. Now, in the 99th Street station what does that mean?

A. So far as the 99th Street station goes, it simply reflects, in order to keep the final accounts correct in the gas transferred, that they include the 99th Street holder station, the 111th Street holder station, the 132nd Street station. They simply record the gas on hand at those stations—

Q. When you say send out—

15745

Mr. Ransom: Let him finish his answer.

A. (Continued.) And the difference between the stock on hand each day indicates the send out as shown by the 99th Street station based on their make, which has really no bearing—

The Master: A sort of journal entry?

The Witness: A sort of journal entry to get the whole combined gas transfer system straightened out.

Q. Does that mean all the gas that leaves there?

A. That leaves 99th Street?

Q. That leaves 99th Street?

15746

A. It means the gas that leaves 99th Street. The only application—in so far as that send out is concerned, it only applies to 99th Street make, and has not taken into consideration in any way the gas that has come into 111th Street or 132nd Street from the transfer system. It absolutely pays no attenion to what is drawn into those holders or out, except as to the stock on hand.

Q. Does not the 99th Street holders contain gas made there?

A. Yes.

Q. And do they not supply the neighborhood there?

A. They probably send out some there.

15747

Q. Don't they send out directly from the 99th Street holders gas directly to consumers?

A. Yes.

Q. And the consumers in the neighborhood there get that gas in accordance with the resistance of the pipes, the conditions that obtain there?

A. They would get some gas there, and it would be mixed with the gas coming from 111th Street, and coming up from 63rd Street. We don't know what gas it is after it is a block away from the plant.

Q. What is that?

A. We don't know what gas, whose gas it is or what gas it is after it gets a block away from the plant.

Q. You mean right around there in that particular neighborhood they may be getting gas made at Astoria?

A. Absolutely.

Q. They may be getting gas made at Ravenswood?

A. Absolutely.

Q. And at 21st Street?

A. Absolutely.

The Master: That is enough.

15749 Q. Well, may we assume that this "send out to consumers" means simply the gas sent to the neighbors—

The Master: No.

Q. Or that it includes all that is made at the 99th Street station which goes out from that station?

A. It takes into consideration the gas which is made at the 99th Street station, and the difference in the stock on hand between 99th, 111th and 132nd Streets would indicate by the record there the gas send out as of that account. As your Honor said, it is a journal entry for the sake of getting up the gas transferred. It does not mean that we do not send out more gas from 111th Street, or 132nd Street, it indicates that

15750 those three stations according to that book, that we send out 3,000,000 or 4,000,000. We may have sent out fifteen or sixteen.

Q. Mr. Woods, will you take your time and just straighten that out now so it will be definite?

Mr. Ransom: I object to the comment of counsel.

Mr. O'Brien: I think counsel wants that straightened out.

Mr. Ransom: It is straightened out. It is confused only in the mind of Mr. Edgerton, and he has imparted some of his confusion to you. There

is not another person in the room that is in any confusion about it. There isn't anybody here, including the office boy who does not understand it.

Mr. Chambers: I do not.

Mr. Ransom: You have not been paying attention, you have been laughing about other things.

Q. You have a governor house on the 99th Street station?

A. Yes, we have a valve house there, governor house.

15752

Q. You have a governor house that regulates the pressure in the holders there, haven't you?

A. Yes, we have a valve there that regulates. We do not have a governor at that particular point, we have a valve that acts as a governor.

Q. Yes, and regulates the pressure of gas sent out to the consumers there?

A. That is right.

Q. And that is on every holder?

A. Absolutely.

Q. You can control the pressure of every holder?

A. Surely.

Q. And thus you control the pressure of the gas that goes out to the consumers? 15753

A. We surely do, at the holder, yes.

Q. And then when you get a demand or telephone message or S. O. S. from some other station, you can shoot gas to them, too?

A. Why, yes, we could shoot it up or down or across town.

Q. Well, now, listen to my question, Mr. Woods. I want to ask you again if this "sent out to the consumers" is to be taken—I will give you the exact number, 3411, for January, 1916, does that include

all of the gas that goes out from 99th Street to whatever place it goes?

A. Yes.

Q. Does it include gas that may have been sent into 99th Street holders?

A. It would.

Q. So that it does not indicate the gas made simply in the 99th Street station?

A. Not if there were gas taken in, no. It would be no reflection of it. It would not indicate the gas made, no.

15755 Q. Now, do you know what territory is supplied by that station?

A. No. They are all connected together. No particular territory.

Q. Well, how are you going to know how to take care of a particular territory?

A. How do we know?

Q. Yes.

A. By watching the pressures. We feed out of these holders at 111th Street into the Standard section and Consolidated section, and at 132nd Street we feed out into the Consolidated and Standard.

Q. Now, we have here the candle power tests.

15756 Would you consider them reliable?

Mr. Ransom: Which ones? I object to the question as indefinite.

Q. Made at the works?

A. I would.

Q. And at 79th Street?

A. You mean the company's tests?

Q. Yes.

A. Yes, I should say so.

Q. So that so far as we have gone here from the first column, everything is reliable information?

A. Insofar as you have indicated, yes.

Q. And the candles per gallon, are those usually computed by the superintendent?

A. By the clerks.

Q. Well, is he usually a mechanical graduate?

A. Oh, no, it is a simple calculation.

Q. He does other work?

A. Oh, yes.

Mr. O'Brien: I saw that flapper flap again, your Honor.

Mr. Ransom: I was trying to get the witness—

The Master: It was a perfectly proper flap. Mr. Woods had his hand up to his mouth and 15758
could not be heard, and Judge Ransom indicated to take his hand away from his mouth. A perfectly proper flap.

Mr. O'Brien: It was just a shadow in my eye.

The Master: Well, I saw it.

Mr. Ransom: I don't want this trial to be entirely between Mr. O'Brien and the witness. I want to hear what the witness says.

Q. Mr. Woods, do not the holders in a given station supply all the gas in the neighborhood—pretty much all the gas in the particular neighborhood nearest to it?

A. Well, it would supply right in the district, yes, probably. 15759

Q. Well, do you keep the gas in a separate holder that is made in a station?

A. Keep gas in a separate holder?

Q. Yes.

A. If we have one holder, why—

Q. Well, you have four or five holders there at 99th Street, haven't you?

A. Oh, we might fill one holder and go over and fill up another, and send it from one back and forth.

Q. You mean you do mix in your holders at 99th Street, the gas which is made there and the gas which is transferred to it?

15760 George E. Woods, Cross.

A. If it were transferred into the station, it would be. But very little is transferred into the 99th Street station, however.

Q. Very little transferred to it?

A. Yes. It is usually transferred the other way, they will send gas uptown.

Q. How many holders have you got there?

A. How many?

Q. Yes.

A. We have two holders in operation besides the relief holder.

15761 Q. You have one that is not working?

A. Yes.

Q. One you use for the storage of oil?

A. Yes.

The Master: I think we have had enough on that.

Q. Now, the manufacturing averages here, showing the oil in terms of gallons per thousand cubic feet, they are made up at the works office.

A. Yes.

Q. And you would accept these as reliable?

A. I should say so, yes.

Q. So that 3.96 gallons for 22 candle power gas
15762 would be a reliable statement?

The Master: Let us see that. Where do you see any 3.96 for 22 candle power?

Mr. O'Brien: All the way down through here, your Honor.

The Master: Not at all.

Mr. Ransom: That does not prove what makes 22 candle power gas.

The Master: Reading down the page, the first item is 3.96 against 23.65; 3.97, 23.66; 3.96, 23.68. There is no place that I have discovered—against the city's tests.

Mr. O'Brien: Why, yes.

The Master: That is not the test.

Mr. O'Brien: That is the test that covers.

The Master: I am not going to let you do that.

Mr. O'Brien: What?

The Master: I am going to let you show—

Mr. O'Brien: Well, all the more strongly does it prove the point I am driving at, that it will produce a greater candle power with .96.

Mr. Ransom: In the works?

The Master: Certainly, six to one, it ought to 15764
be; at 4 it ought to be about 24, ordinarily.

Mr. Ransom: 24 or 25.

Mr. O'Brien: Your Honor, I have been testing this man's statements.

The Master: Just question him on the right columns; don't mislead him. You know perfectly well—

Mr. O'Brien: This is midwinter.

The Master: As I looked at the page I could see at once, and that is what made me interrupt you before you asked a question, that it ran about six to one, about four gallons to 24 candle power; it runs sometimes higher and sometimes lower. 15765

Mr. O'Brien: What I am trying to find out is what this book shows as to the gallons of oil for 22 candles.

The Master: It don't show it at all.

Mr. O'Brien: Well, it does from the city's tests.

The Master: Oh, no, that has been mixed with other gas.

Mr. Ransom: This plant does not run as high in the works in order to make the candle power on the district.

Mr. O'Brien: They have pipes for every company.

The Master: I am not going to let you prove the city's tests that way.

Mr. O'Brien: By what?

The Master: By taking the figures in that book.

Mr. O'Brien: The city's tests, if they set up for the separate companies at the city's testing stations—they have got gas that is supposed to be the gas of the Consolidated, and gas of the New
15767 Amsterdam and gas of the other allied companies.

The Master: The point I am making is this: I am not going to let you assume that because the city notifies them that their tests show certain figures, that those figures were correct. I am not going to bind the gas company by that.

Mr. O'Brien: I did not ask you to do that.

The Master: Well, come on, next question.

Mr. O'Brien: I hold to the point here, where we have that 22 candles as from the company's test at 79th Street.

The Master: Yes.

Mr. O'Brien: And that is on the—

15768 The Master: What was the works test on that?

Mr. O'Brien: The company's test—this Friday, January 7, 1916.

The Master: What was the works test?

Mr. O'Brien: The works test was 23.67.

The Master: And the test at 79th Street?

Mr. O'Brien: The test at 79th Street was 22.08.

The Master: Yes, and the city test on that date?

Mr. O'Brien: 21.93.

Mr. Ransom: Well, I object to putting in any of the city's tests in that way.

The Master: I just wanted it because I knew it was pretty close to 22 there.

Mr. O'Brien: And the oil is 3.96.

The Master: That is all right, now what is your question?

Q. The question is whether the witness would take that as a reliable statement for that particular date?

A. Yes.

The Master: That it took 3.69 gallons of oil to make 23 plus candle power at the works, which 15770
tested a little over 22 at the 79th Street station?

Mr. O'Brien: 22.08.

Mr. Ransom: That assumes that the gas tested at 79th Street was merely 99th Street gas, whereas it may be other works, the 21st Street plant, for example, where they are getting higher candle power than 23.

Mr. O'Brien: I am going to object to counsel's statement now and counsel becoming a witness.

The Master: I think the statement was proper as calling my attention to that particular fact.

Mr. O'Brien: What is that?

The Master: That is this: As I understand Mr. 15771
Woods, practically or substantially all the gas that is made at 99th Street probably reaches the consumers in that neighborhood. He does not think there is much gas drawn in or transferred to 99th Street.

Mr. Ransom: Into the holder; not into the neighborhood. He has not said that.

The Master: Into the holder.

By the Master:

Q. Now, does that test at 79th Street come directly

from the works at 99th Street, the gas come from 99th Street?

A. It does not, your Honor.

Q. So that the test made at 79th Street does not necessarily mean gas made at 99th Street?

A. Of all the gas that goes into our transfer system.

Q. Just answer that. If I go to the 79th Street testing station and make a test of gas there, will I be testing 99th Street gas?

A. You would not, and I would not know whose
15773 gas you were testing.

By Mr. O'Brien:

Q. Why do you say that?

A. Because—

Q. On what do you base that statement?

The Master: You asked him why he said that.

The Witness: Because I know with the mixture—I know that in the transfer system that the average production at 99th Street represents three per cent of the gas that goes into the transfer system, and that when we try to undertake to say that we can locate that three per cent at a distance from that point, that it is not possible to
15774 do.

The Master: Is that what you had reference to when you said you could not tell what gas it was a block away from the works?

The Witness: That is right; there is a mixture, your Honor. We are getting all these gases that are absolutely mixed, and we do not know one gas from another.

Q. Do you say that the send-out of 99th Street station was only three per cent of the total send-out used by the Consolidated and allied companies?

A. From three to four per cent, yes, at 99th Street—

The Master: You have answered it.

Q. Did you have charge of the laying of the mains from the 99th Street station to the 79th Street testing station?

A. I did not.

Mr. Ransom: I object to the question. He has not said there were any mains laid.

The Master: He has answered; he said no.

Q. How does the gas go down to the testing station; does it go down by direct main, or is it a distributing main, or what is it?

A. A distributing main. 15776

Q. Is it a direct main from 99th Street to 79th Street?

A. It is not.

Q. Isn't it supposed to be?

A. Not any more than any other distributing main.

Q. Hasn't the City of New York, the authorities of the City of New York, been led to believe that it is?

Mr. Ransom: I object to the question.

Mr. O'Brien: Just a minute now. We will get it right.

Mr. Ransom: How does he know?

The Master: Well, do you know? 15777

The Witness: I do not know.

Q. Don't you get cards, postal cards from the department of water gas and electricity daily, that purport to show the tests of the 99th Street Station—

A. We get cards showing the—we get tests from 44th Street and 18th Street and from the 18th Street and 14th Street station from the city, and the 18th Street station has been shut down for twelve or fifteen years; the 44th Street station for four or five years; we get tests from the Equitable Gas Company which has not been in existence for fifteen years; we

get tests from the East River Gas Company which has been out of existence and is now known as the New Amsterdam Gas Company, and we get all those things from the city.

Q. Even now?

A. Even now.

Q. Have you ever made any statement about it to the city authorities?

A. They are testing it.

Q. Did you make any statement to the city authorities about it?

15779 A. No, I have not made any statement to them.

The Master: You are not specially interested in it?

The Witness: No.

Q. So your contention is that the gas at 99th Street, at the 79th Street testing station, which is flowing through the pipes there of the Consolidated Gas Company, may have come from any place?

A. That is right.

Q. It may be a combination of half a dozen places?

A. That is right.

Mr. Ransom: Including 21st Street, which uses very much—

15780 The Master: In other words, I get the picture, Mr. Woods, that you can no more identify the gas in any distributing main in Manhattan Island, than you can identify the water in the Hudson River opposite Nyack as to what stream or spring it came from?

The Witness: That is right, your Honor.

Q. Do you say that as an experienced gas man?

A. I do.

Q. Mr. Woods, you stated previously that there was a direct transfer from holders in the 99th Street station to consumers in the neighborhood?

A. I said gas would go out into the neighborhood, yes.

Q. Well, now, answer my question yes or no. I did not ask you whether it went out into the neighborhood. I asked you whether there wasn't a direct transfer from the holders to the neighborhood?

A. There is a direct line from the holder into the streets in that section, yes.

Q. It does not connect with the transit mains?

A. No, but it connects with the 111th Street holders and connects with the distributing mains from 111th Street. 15782

The Master: Mr. O'Brien, you won't get any better answer. This witness insists that although there is a line straight out from this holder into the neighborhood, which carries the gas made at 99th Street into that mains out into the neighborhood, the minute it leaves the works it meets gas coming from other parts and you cannot distinguish the gas a block away from the works. That is his statement. Is that right?

The Witness: Yes.

The Master: Now, what is the use wasting any more time on it. Mr. Edgerton may not agree with me, but that is his statement and I am inclined to believe it. 15783

Mr. O'Brien: Well, we will prove it to you mechanically and every other way, your Honor.

The Master: But the statement seems fair on its face.

Q. Now, the generator account, fuel accounts, these are made up from reports from the generator house and boiler house?

A. Yes.

Q. They are turned in daily?

A. Yes.

15784 George E. Woods, Cross.

Q. Your foreman of the gas makers turns in the reports of each man?

A. It is the foreman that turns in these reports, yes.

Q. He has—the gas makers have their report, the form, right on the machine when they are—when there is a blow and a run?

A. Yes.

Q. And they make their notations from the oil meters as to the amount of oil they use?

A. They do.

15785 Q. And they turn in reports each day which give each detail and the amount of oil used every run?

A. Well, that is the gas maker's record, simply a gas maker's sheet.

Q. It is what?

A. It is a gas maker's sheet, the record of operation of his particular run and for his operations for the day, so that the superintendent can analyze his operation.

Q. And they are made the basis of this manufacturing book?

A. Oh, no, they are not.

Q. No?

15786 A. No.

Q. Where does the information that is recorded here under the general title, "Fuel accounts," come from, if not from the reports made by the gas maker?

A. They are recorded on sheets as to the amount of coal that is used, the same as the oil would be. That would indicate—that would be the number of buggies, etc, of coal on a gas maker's sheet.

Q. That is what I mean?

A. The gas maker's sheets sometimes are used to check up the others.

Q. The gas maker's report shows the oil used, does it?

A. As by his meter.

Q. As by his meter?

A. Yes; which is not—

Q. I did not ask you to add something. It shows the time of the run, doesn't it?

A. Yes.

Q. It shows the amount of coal used in a day?

A. The number of buggies, probably.

Q. And the weights?

A. The weights would probably be there. 15788

Q. Have you brought any of the reports with you?

A. I have not.

Q. Did you use any of them in the making up of any of the exhibits?

A. I did not.

Q. That were put in since you were on the stand?

A. I did not, not one of them.

Q. And this report is turned in as to the coal used and finds its way into these columns, does it not?

A. Yes, through that and other reports.

Q. What are the other reports?

A. Well, the coal is weighed, the coal report would come in and the oil measurements of the tanks which 15789 would be indicated. Those things would come in as a check on the others.

Q. Well, doesn't the—aren't the oil measurements at the tank also sent to the foreman of the gas makers?

A. No. The foreman of the gas makers would not be interested in them.

Q. I did not ask you whether he would be interested in them but I want to know just the way that comes into the work office?

15790 George E. Woods, Cross.

A. It comes in through the men that measure the tanks. Every morning the tanks would be checked up and they would be sent in as a verification of what the oil meters would be.

Q. Well, does the report of fuel used under the boilers come in directly from the boiler house to the superintendent?

A. Oh, no, that would be put on a slip and weighed. The boiler maker—the boiler house man might not know. He might know the number of carts that were hauled into the boiler house, but the weights would be
15791 taken possibly by that octogenarian you spoke of, who, however, is only seventy-nine years old and an extremely good employee, and I think does the work probably better than anybody we could hire between twenty and thirty. A man who is extremely glad to hold his job, and we are extremely glad to keep him, and I only like to have this opportunity of saying that we are particularly fond of octogenarians, and probably it is the result of that that we have a certain amount of the *esprit de corps* you spoke of the other day; and there must be something good about a gas company, Mr. O'Brien, when that thing exists.

15792 Q. When they cling around? Well, now, you did not mean the other day when you spoke about Mr. Bradley's years, to indicate from that he was decrepit?

A. I did not indicate any of them were decrepit.

Q. You did not mean that Mr. Bradley—

Mr. Ransom: I object to that.

The Master: Objection sustained.

Q. That his capacity for doing work has been—

Mr. Ransom: I object.

The Master: Objection sustained.

Mr. O'Brien: Well, he took me off with that octogenarian.

Q. Where did you hear about my remark concerning octogenarians?

Mr. Ransom: Objected to.

The Master: Objection sustained. He probably heard it standing over in City Hall Park somewhere.

Q. I want to get the boiler house fuel. There is a record of it made some place out on the job, isn't there?

A. There must be, yes.

Q. Is it turned in usually by the foreman in charge of the boiler house? 15794

A. Well, probably by the weigh master. I do not recall just the exact man that brings it in.

Q. Well, you have made figures that are based on those reports?

A. Yes.

Q. And if they have made a mistake, or if they just averaged it up, the reports are unreliable, aren't they?

A. That is absolutely what I based my figures on, is the monthly reports.

Q. The monthly reports of the works?

A. Yes.

Q. At the works? 15795

A. Our monthly reports of the works' operation, from the works, yes.

Q. And on them your opinion as to the quantities used?

A. As to quantities used in so far as our reports are concerned, that is what we base our calculations on.

Q. The month of January, 1916, the middle of January would be ordinarily a rigid part of the winter?

A. I do not recall now what it was.

Q. Well, of any winter, I don't mean this particular winter?

A. Well—

Q. Ordinarily January is a rough month?

A. January is the winter.

Q. Well, haven't you stated that in the winter time of course you would need more oil to produce a given candle power?

A. We do.

Q. And the quantity of oil used for 22 candle power gas in the winter time will be the maximum?

15797 Mr. Ransom: I object to the use of this indefinite term, "22 candle power gas." Does he mean 22 candle power at the works test or the test on the district?

The Master: In view of the witness's statement I will not take any tests on the district as applicable to any particular works. It must have reference to the works test.

Mr. Ransom: The company does not base anything on 22 candle power at the works. What they have to do at the works is to make such candle power at the works, as to keep the candle power up on the district.

15798 The Master: I wonder if you think you are telling me something?

Mr. Ransom: I am addressing myself to an objection.

The Master: It is entirely unnecessary.

Mr. Ransom: And the objection has not yet been sustained.

The Master: I made a ruling on it.

Q. Mr. Woods, I will come back to that later, when we come back to your exhibit, giving you a hypothetical cost of making gas reduced to cents per thousand cubic feet.

The Master: Is there anything in this that indicates the amount of gas oil to January, that there was a lesser requirement of oil than he has been talking about?

Mr. O'Brien: Yes.

The Master: Point it out.

Q. Would you deem these figures reliable which I read, of the quantities of oil used in January, 1916, at the 99th Street station—

The Master: Wait a minute; I will not let you read those figures unless you read the works figures in comparison with them. The works 15800
test, January 1st, was 23.65 and the oil was 3.96. Now, go ahead and read what you like.

Q. This is in the sequence of the calendar days of that month, January, 1916, beginning with the first:

Candle Power	*Oil*
23.65	3.96
23.66	3.97
23.68	3.96
23.65	3.97
23.67	3.96
23.70	3.97
23.67	3.96

Then there is an average, this is in red ink, and that 15801
is likely the average for the week, is it?

A. Probably.

Q. That is 23.67 and 3.96.

Candle Power	*Oil*
23.65	3.97
23.67	3.96
23.68	3.97
23.80	3.97
23.65	3.96
23.68	3.97
23.66	3.96

15802	Average	23.68	3.97
		23.47	3.97
		23.71	3.97
		23.57	3.97
		23.34	4.03
		23.30	4.05
		23.40	4.02
		23.56	3.95
	Average	23.61	3.98
		23.66	3.95
		23.37	3.95
15803		23.67	3.96
		23.68	2.97
		23.83	3.98
		23.98	3.98
		23.67	3.97
		23.66	3.96
		23.67	3.97
		23.68	3.96

The Master: Now, what is your question?

Q. They are reliable figures, you would assume?

A. You mean are those figures reliable?

Q. Yes.

A. I think so, yes.

15804 Q. Showing—

A. Showing the operation at that plant.

Q. Now, what drop in candle power ordinarily would take place owing to the difference in temperature between 99th Street station and a city testing station?

A. It would depend upon the time of the year and the ramifications of the line.

Q. Give us the maximum.

A. I know that taking the lower section of the city we have greater difficulty to maintain candle power than we do in the upper end.

Q. Well, take in the lower end of the city, would you have to produce a 23.95 candle power to produce 22 candle power at the city testing station?

A. At times at 21st street we run 25 to 26 candles.

The Master: Why is that?

The Witness: Because we get a drop on the district, the ramifications through the lines, et cetera, and in order to get the candle power at our testing station, there are times that we have to carry that candle power.

Adjourned to Friday, October 24, 1919, at 2.00 P. M. 15806

Last Complainant's Exhibit 358.
Last Defendants' Exhibit MM.

15807

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 15811

Before: ABRAHAM S. GILBERT, Special Master.

New York, October 24, 1919.

Present: MR.. RANSOM, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.

By direction of the Master, (owing to his actual engagement in the Appellate Division of the Supreme Court for the First Judicial Department this afternoon), further hearing in the matter adjourned to Monday, October 27, 1919, at 2 P. M. 15812

Adjourned to Monday, October 27, 1919, at 2 o'clock P. M.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.*

Before: ABRAHAM S. GILBERT, Special Master.

New York, October 27, 1919. 15813

Met pursuant to adjournment.

Present: MR.. RANSOM, MR. VILAS, and MR. GOETZ, of Counsel for Complainant
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission.
MR. O'BRIEN, of Counsel for defendant Swann.

15814 George E. Woods, Cross.

Mr. Hayward: If the Master please, the representatives of the defendants keep raising trivial questions about quarrels between them and the clerks up at the Gas Company and they are putting all hindrances in their way. It is a very simple matter. I have a statement here about which I do not know anything personally, because I was not there, but they seem like trivialities, of course, but our people say they cannot do their work under those conditions, and if they cannot we will simply have to withdraw them.

15815 Mr. O'Brien: I think if you put Mr. Frankl right on the stand under oath he will tell the whole story, because you only have a little memorandum here as to one day's experience. It might be assumed from that that is all there is of that experience.

Mr. Hayward: It is so little and trivial it is not necessary, perhaps, to burden the Master, but this frank disclosure idea does not seem to be carried out (handing Master and Mr. Ransom copies of memorandum).

Mr. Ransom: What do you mean by the Monthly Record of 1918-1919?

15816 Mr. Clark: The monthly reports.

Mr. Ransom: Do you mean those monthly reports you were asking about the other day?

Mr. Clark: Yes.

Mr.. Ransom: My position on that is very frank. The Master directed that that be exhibited to counsel. It has been exhibited to counsel and it has also been exhibited to some extent to Mr. Frank.

Mr. Hayward: Did the Master understand that Mr. Clark's examination of that thing at the time that it occured was to be the exhibition to counsel of the matter he had presented?

The Master: I intended, Judge Ransom, that they were to have access to that book, with the same freedom as to any other book.

Mr. Ransom: That is not what was directed.

The Master: I am not going to be held down to technical language.

Mr. Ransom: Our position is very clear.

The Master: My position is very clear, too.

Mr. Ransom: That book it not a matter which people generally have any business examining. It is not a part of the accounting records of this company. 15818

The Master: I heard all that, and I ruled that you should let them see it, and that ruling was not to be construed in any such technical fashion as you construe it.

Mr. Ransom: And the answer was that although on this particular morning, that Thursday, the matter came up in court, they did not get it until 10:50, they have had it ever since. Mr. Davidson is here, and he says that is true. As far as the payroll question is concerned, Mr. Frank—

The Master: To interrupt you, if Mr. Davidson is not there, there should be somebody else there. These men should not be required to wait until Mr. Davidson gets there. 15819

Mr. O'Brien: The shuttlecock method, your Honor.

The Master: Have Mr. Davidson there, or Mr. Jones or Mr. Smith or some other person.

Mr. Ransom: I can see this matter very plainly. This matter came up in court, and until Mr. Davidson arrived there was no one in a position to deal with it. After the position had been established, why there was no difficulty about it.

Your Honor has given directions which were contrary to the view of the company's officers and its counsel. As soon as those directions were brought to Mr. Davidson's attention they were complied with, and up to that time they were not. As to the matter of the payroll, the payroll was completely checked to the extent it was desired.

The Master: If they want to see it again, let them see it again.

Mr. Hayward: Your Honor, I did not ask for a ruling on your part that would cover the pos-
15821 sible technical thing that might come up, but I thought that when the Master said yes, that it meant yes, and that meant it to the reasonable extent it would naturally imply, not that they would hold the Master and hold us to the very technical words you have used.

Mr. Ransom: Only on the matter of these monthly reports, as to which we take the view we are not under any obligation to give them to the defendants, and which we will not allow them to examine except to the extent allowed by your Honor.

The Master: I have allowed it to the very full-
15822 est extent.

Mr. Ransom: And they have had it.

Mr. Chambers: Why don't you give them the payroll and not talk so much about a frank disclosure?

Mr. Ransom: I will not. They have had the payroll and looked it over thoroughly.

Mr. Chambers: They claim you withheld the pay rolls.

Mr. Ransom: That is not true.

Mr. Chambers: How can you say it isn't true?

Mr. Hayward: I do not know. I cannot weigh

each time the importance of what these statiticians and these people have in mind, because really I am stupid about those things; but when they say they want it for a bona fide purpose or to throw light on the case, to expedite our work and their work, these cases really come down to a controversy between experts.

The Master: I cannot understand the attitude of counsel for the complainant in creating these issues. There ought to be more access than anybody else says, to avoid giving these people, that is the experts or accountants, a chance to say that 15824
they have not been given it.

Mr. O'Brien: They are confining it to a peep through a periscope. You have got to go in and see this, and while you are looking at it they chase around—why, I was up there looking at those books myself before I attempted to cross-examine Mr. Brundage on the preliminary examination, and they were keeping tabs on every book worked on and watching the work. That is not fair, you know. I am going to present this thing in affidavit form, when I come to it. It will not be one of those mild little kicks, but I will have it here in affidavit form in this case to show there is 15825
not a real disclosure.

The Master: I will not decide this case until counsel have an opportunity to look at every record I think is pertinent.

Mr. O'Brien: We are going to find out every place a penny goes in this case. Publicity or anything else, it is coming out before I get through with it.

Mr. Ransom: If there are any records which they have not had, which have not been seen which your Honor thinks they ought to have and ought

15826 George E. Woods, Cross.

to see, they shall see them. They have had this general offices payroll, they have seen it and had it since 10:50 on the morning after your Honor directed it; they have had this monthly statistical stuff; they have had this general offices payroll—

Mr. Chambers: Mr. Frank says he has not had it. He said they would not give it to him.

Mr. Hayward: He has not had it.

Mr. Ransom: This I will not change from. I am not going to allow, in view of the tactics of
15827 representatives of these defendants, unless I am compelled by process of this court—I am not going to let the general offices payroll of this company be taken indiscriminately around the building and peddled around town by people who want to get a little cheap notoriety for themselves out of using it. I will not permit the officers of this company to be humiliated in the way that has been persistently tried by the representatives of the defendants in this case, by having these little salaries shown up.

Mr. O'Brien: Why don't you come out and say we will give it to them?

15828 Mr. Hayward: I would like the Master to ask Judge Ransom a question. I would like the Master to ask just what he means by taking these payrolls and peddling them around from place to place and giving them publicity and using them for an ulterior motive.

I ask you to ask him to state what he means.

The Master: Yes. I will ask him to state that.

Mr. Ransom: All right, I will state it. There has been in the judgment of the complainant and his counsel a persistent and flagrant effort with respect to officer after officer of this company,

as called to the stand, to bring out matters to humiliate the persons called to the stand, by bringing out the inadequate salaries paid to these persons. In the case of the general officers of the company, as of those who have not been called to the stand, I am not going to permit, unless this Court requires it, these pay rolls to be taken up into the rooms and used by the defendants on the 17th floor of this building so that these lists may be copied, so that these lists may be peddled around town.

Mr. Hayward: Just what do you mean by 15830
peddled around town?

Mr. Ransom: I do not think it is in any way within the province of a proper decision in this case.

The Master: Let me ask you, do you mean to take the position that the executives' salaries is not a matter for investigation by me?

Mr. Ransom: I do not.

The Master: Then are not these defendants entitled to know what these executives' salaries are?

Mr. Ransom: They have had them.

The Master: I do not get your point. 15931

Mr. Hayward: But we have not. That is not a true statement.

Mr. Ransom: They have had the payroll and gone over it and checked the items of disbursement or account of it appearing thereon, but what has not been done is this: The thing has not been taken up into the rooms where this great number of people have been working. Unless Mr. Frank is compelled to disclose these things, which he has not a right to do under the law, as he knows it, no one will know the salaries unless it is brought

out in a regular way here. No one will know these salaries except as brought out here.

Mr. O'Brien: We get a little peek at the paper and they say, "Now, you see that line there; you have got that," and the rest is covered up. That is coming up in this case.

The Master: I will recognize Col. Hayward.

Mr. Hayward: It seems, if the Master please, that we have not had such access to the pay rolls, and our experts have not, that we could tell the name of the person to whom it is paid. As I
15833 gather from what this young man says—and I believe him—the procedure is to check the various amounts shown there charged to the operating expense account, as the statement is prepared, but not the individual payroll accounts of these people at all, and not since September 26th, since we started to get those, have we been allowed to, in spite of what you said.

The Master: That is the book that was in court here?

Mr. Hayward: This is the payroll book.

The Master: Where is the usual place to have that payroll book?

15834 Mr. Ransom: It is in the cashier's office where Mr. Frank saw it.

The Master: I want Mr. Frank to have the fullest access to that book; I want it to remain open to him in the cashier's office. I want him to look at it as long as he pleases to get what information he wants and all the information he wants.

Mr. Chambers: All the years back we want.

The Master: Why, certainly.

Mr. Ransom: It is understood that Mr. Frank accepts his responsibility under the law for not communicating that to any individual?

The Master: I assume you are dealing with gentleman.

Mr. Ransom: I would like to assume that.

Mr. Hayward: Don't you think Mr. Frank is a dependable and reputable man?

Mr. Ransom: I want to be understood that Mr. Frank is honest—

The Master: Do not get into that. I want to avoid argument.

Mr. Hayward: He is a regular employee of the Public Service Commission.

The Master: All right. I want Mr. Frank 15836
to have the fullest opportunity to inspect those records.

Mr. Ransom: So do I.

The Master: Now, let me say this, Judge Ransom—

Mr. O'Brien: What is in that book is going to be a public matter, put right into this record.

The Master: Let me say this, Judge Ransom: It ought to be the desire of the complainant company and its counsel to afford to counsel for the defendants and their reputable engineers or experts, the fullest opportunity to check up every item of those books so as to raise every possible 15837
question as to the cost of making and distributing gas and the expense of operating their business, to the end that when this case is in, there will not be any insinuation or intimation that there has not been a frank disclosure, or that matters have been withheld. I should imagine that that would be the desire of the Gas Company.

Mr. Ransom: It is the desire of the Gas Company.

The Master: The anxiety of the Gas Company. Now, when this case is in, and there is any open

15838 George E. Woods, Cross.

question as to the opportunity to look at any record, I am going to hold this case open so that the defendants will see those records before I decide this case, any record that I think is pertinent.

Mr. Ransom: I don't think there has been any record—

The Master: You might just as well avoid this friction.

Mr. Ransom: There hasn't been any record to which they have not had access. All I say is
15839 this, and I say it respectfully and deferentially, that I haven't any objection to Mr. Frank or Colonel Huyward or Mr. Chambers looking at that payroll. I haven't any objection to their making further checks of it. Mr. Frank says here in this memorandum that he has already checked it. I haven't any objection to his checking it twice or three times, but what I do object to is having it taken elsewhere, so we don't know who sees it.

The Master: I will direct that the examination be made in the office where the records are usually kept.

15840 Mr. Ransom: If Mr. Frank violates the statutory duty, we can deal with him, but if we don't know who sees it and don't know who examines it—

The Master: I understood that it was the attitude of the gas company that they wanted all these records examined in a particular room. Now, you say you want these records examined in the cashier's department, and we will have them examined there.

Mr. Ransom: We don't want them left around.

Mr. Chambers: As the record stands, he makes

the point that Mr. Frank is the only one to see it. Our experts, I will want to see them, too.

The Master: Well, you don't need a half dozen. When you designate the man there will be one man to look at them. The Public Service Commission has a right to have a man look at them, and so has Mr. O'Brien. I do not limit it to Mr. Frank. I suppose my language, strictly construed, limited it to Mr. Frank, but it means the defendants, each one of them, is entitled to have somebody look at them.

Mr. Ransom: If we know who it is we can hold 15842
them responsible.

Mr. Hayward: I would like to raise also at this time the question of monthly reports. I understand there are reports of the manufacture of coal gas at the Astoria plant, and we had those same monthly reports for the Consolidated Company, but they did not help us any on the coal gas.

The Master: I do not think I can direct the production of records of the Astoria.

Mr. Hayward: I would like to have that noted, that they have refused them.

Mr. Ransom: Mr. Davidson says they have not 15843
even asked for those papers now referred to.

Mr. Hayward: Well, you were asked yourself and said we could not have them unless we agreed to put them in evidence.

Mr. O'Brien: Davidson was there while I was working with the Kings County case a good part of last year, and we had the same difficulty there until finally Judge Greenbaum made them bring the books up and put them in the room in the Court House, we had so much trouble. That is Davidson's tactics, you know.

The Master: I don't think I have power to direct the disclosure of the Astoria records.

Mr. Hayward: Judge Ransom stands up here in the most brazen faced manner and says they have not even been asked for, when I know that I have asked Judge Ransom and Mr. Carter myself for those records. What do you mean by that?

Mr. Ransom: We have taken the position, in the absence of the Master's direction, that we would not produce any such thing unless you will
15845 let them go in evidence.

Mr. Hayward: What do you mean by saying it has not been asked for?

The Master: What is the record you are talking about?

Mr. Hayward: The Astoria records. He says they have not been asked for.

The Master: Is there any dispute about the point that they have been asked for, and you said you would not permit them unless they were put in evidence?

Mr. Ransom: I have made the statement, your Honor knows, with respect to those records.

15846 The Master: This is the first I knew about those Astoria records.

Mr. Chambers: He wrote me a letter in which he said we might have a full and frank disclosure of the Astoria Light, Heat & Power Company records. Why did you say that?

Mr. Ransom: Because these statistical studies are not part of any kind of record.

Mr. Hayward: I have a letter from all of these companies, including the Astoria Company, all in the same language, all this very frank disclosure business, "Will you please come into our offices?

All you have to do is to indicate to Judge Ransom what the record or the book is that you desire to see." That is in the letter that they sent to all of us from all these allied companies; and then when we go and ask for them, it is all bluff, they won't give them to us.

Mr. Ransom: So far as these statistical studies, you have no right to them, they have no more right to them than I have to the papers in their law offices.

Mr. Hayward: What that meant was we could have the things they wanted us to have, and not 15848
the others.

Mr. Ransom: You can have the books of account and everything that underlies the books of account.

Mr. Chambers: What we object to is—

The Master: That is the comparative monthly record.

Mr. Ransom: Yes.

The Master: I ruled that you must show them as applicable to the Consolidated.

Mr. Ransom: And it has been done.

The Master: As far as the other companies are concerned, I won't direct it. Go ahead. 15849

Mr. O'Brien: Is that on the theory it is not in this case?

The Master: At this time, yes. If they come in a little later and undertake to prove what it costs the other companies to make gas, then it may come in.

Mr. O'Brien: I will have an affidavit here in a few minutes on this same question of lack of frank disclosures, your Honor.

The Master: I would rather have you go on with some questions.

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Mr. O'Brien: Time consuming tactics.

Mr. Ransom: There isn't any time being consumed by Mr. Bemis at the offices of the Consolidated, I will guarantee that.

Mr. O'Brien: It looks to me as though they are simply going to try and tire everybody out until they come to the defendant's case, and then say, we can't prove it.

Mr. Ransom: No time is being consumed by representatives of the Corporation Counsel's office at the company's office.

15851 Mr. O'Brien: Please read that statement.

(The statement was read.)

The Master: Have you any other questions to ask this witness, Mr. O'Brien?

Mr. O'Brien: I have, your Honor.

The Master: Well, go ahead with it. I won't take any affidavits just now. You will have to hold any application based on affidavits, until we get through with this witness.

Mr. Chambers: If the Master please, in order that there may be no trouble about this veiled threat of Judge Ransom's, let me ask your Honor, will you make an order now upon the record,

15852 that whatever information Mr. Weber or Mr. Frank, or any other employee of the Public Service Commission obtains while making an examination of this company's records, be disclosed fully and freely to the other defendants in the case? May we have that protection?

Mr. Ransom: This Master has no power to waive the provisions of law.

Mr. Chambers: We will take his direction on that.

The Master: You mean counsel to the other defendants?

Mr. Chambers: Yes, or Mr. Maltbie or Mr. Bemis.

Mr. O'Brien: I have the accountants there, your Honor, working.

Mr. Hayward: There is provision in that law, perfectly clear, that experts of the Commission going out to examine an accident or something are not to run to an attorney for a defendant in an accident case, or something, and disclose it.

The Master: I don't believe that I have the power to make that direction. I will simply say 15854
that it is my opinion that if, for the purposes of convenience and saving triple work, the acccountants or employees of the Public Service Commission check up these items and instead of having the other experts going to do the same thing, the expert of the Public Service Commission give their work to the other defendants' experts, that they are not violating this law, and cannot, in the nature of things, be violating it. That is my judgment. I do not believe I have any power to make an order on it.

Mr. O'Brien: Your Honor, we have been given permission to visit the Astoria works, and that 15855
has not been done as yet, on the Astoria books. That would be necessary during the current week, it will be necessary to look into it.

The Master: I will not make any order about the books of the allied companies. If these companies have offered to submit these books for inspection, that is one thing, but I will not make any direction.

Mr. Ransom: The books of account and all underlying data of the Astoria Company are open to a free and complete inspection of all the defendants, which they have been after for some time.

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Mr. Chambers: For the purposes of the record, I will consider the offer made by counsel for the complainant that we have the right to examine all the records of the allied companies, as a nullity, in view of his present attitude. The offer was not made really in good faith, but was a paper offer.

Mr. Ransom: The representatives of the defendants have used the offer, even though it is a nullity.

15857

GEORGE E. WOODS, resumed the stand.

CROSS-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Woods, we were talking about the difference in the candle power as shown by the tests in the works and at the city testing stations, at the close of the last session. Is there a uniform difference between gas made at the various works of the complainant company and the affiliated companies and the candle power shown at the testing stations?

Mr. Ransom: I object to the question. The question does not define which testing stations he means. There is no evidence in the case war-
15858 ranting paying any attention or attaching any importance to the city testing station records. Such evidence as there is indicates their unimportance.

The Master: Question allowed.

Mr. Ransom: Exception.

A. There is not a uniform difference. The difference varies from place to place and from time to time.

The Master: From the report at the city testing station? Between the reported city test and

your test? Mr. O'Brien's question was, "Is there a uniform difference between the company's test and the city's test?"

The Witness: The company's city test?

The Master: The company's own test and the city's test.

The Witness: There is not a uniform difference.

Q. It is not uniform?

A. No.

The Master: Well, you mean by the city's reported tests on these cards that you get? 15860

The Witness: Right.

The Master: In other words, there is no uniformity between the—in the variance between the city's reported test and what your people test?

Mr. Ransom: The trouble with the question was that it undertook to compare the company's tests at the works and the city's tests out on the district, and we wanted to know whether there was any uniform ratio of difference between the work's test of the company and the city's test on the district.

The Master: Well, is there any uniform difference there or ratio? 15861

The Witness: There is a difference.

The Master: Between the city's reported tests, as you see it on the postal cards, and the company's works test?

The Witness: There is a difference. It is not a uniform difference, your Honor.

Q. Well, do you actually know whether they copy the reports from the city's tests into the manufacturing books at the stations?

A. Do I actually know that they do?

15862 George E. Woods, Cross.

Q. Yes.

A. I assume that they do. I have not seen them put in personally. I assume that they do.

Q. Well, how long is it since you went into that matter?

A. I don't know as I ever went into it, to make any—specifically, to state whether they do it or not.

Q. Is there a written order, or is there an oral direction to the superintendents of stations, to see to it that there is a record from day to day, in the manufacturing books, of the results of the city's tests as

15863 shown on the communications from the city?

Mr. Ransom: I object to the question as incompetent and immaterial.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I am dealing here with the manufacturing book.

The Master: I know you are. Your manufacturing book apparently has entered into it city tests?

Mr. O'Brien: Yes.

The Master: I am not going to let you prove what the city tests were in that way.

Mr. O'Brien: Well, that is not my purpose.

15864 The Master: Indirectly that will be the result.

Mr. O'Brien: Oh, no, I will supply the tests.

The Master: Next question, that objection sustained. I don't care whether there was a ratio here or not, the fact remains that upon looking at this manufacturing record there apparently are entries of city's test?

The Witness: Yes.

The Master: Which would indicate that the clerk had entered it?

The Witness: Right.

The Master: Either under some oral or written instruction or practice of some kind?

The Witness: Yes.

Q. Mr. Woods, I call your attention to the manufacturing book for the 99th Street station, and ask you if you can explain the interpolated red ink figures on the various lines in various columns and particularly the column that deals with coke and breeze?

A. I gather that the coke is in black and the breeze figures are in red.

Q. And those breeze figures come into the works office from what source? 15866

A. I suppose from the weightmasters.

Q. Don't you know.

A. I do know that they are weighed by the weightmaster and taken in after weighing.

Q. To whom does the weightmaster turn over his reports?

A. To the clerk.

Q. Directly ?

A. He hands them into the office. A clerk would get them, yes.

Q. Did you say, "If he does hand them in?"

A. I said he does hand them into the office, and a clerk would get them.

15867

Q. Well, how long is it since you have been over the works; do you make it a business to go around frequently?

A. Around the works, yes.

Q. When were you there last?

A. I haven't been there in two or three weeks.

Q. How often have you been there this year, 99th Street?

A. I could not undertake to say.

Q. Approximate it.

A. I would not undertake to approximate it.

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Q. Do you mean to say that you can't remember?

A. No, I can't remember. I have probably been there forty or fifty times, possibly.

Q. You would say you have been there forty or fifty times?

A. I would not be surprised. I do not recall the figure now.

Q. Will you state positively it is forty?

Mr. Ransom: I object to the question as immaterial.

The Master: Objection sustained.

15869 Mr. O'Brien: Your Honor, I am going to go into the question as to how close this man superintends the manufacture, whether he depends greatly upon the reports that come into his possession, resting upon the ability or the loyalty of the men under him, or whether he personally goes around and sees them. He has given us here various expert testimonies that are predicated upon what is going on in these plants. Now, if he is only there perfunctorily, if he just gives it the once-over once in a great while, it is important for us to know that. He has made up the statement here as to the labor, and he has depended

15870 upon some written reports that come in and I am going to find out how often he has been there and how much he is in touch with the superintendents of these plants, and how much he knows as to the labor that is employed.

The Master: The objection to that will be sustained.

Mr. O'Brien: Exception.

Q. How often during the current year have you been at the 21st Street plant?

Mr. Ransom: I object to the question. It has been fully covered.

The Master: I will allow it.

A. I don't know how many times.

Q. Approximately?

A. It might be 40, it might be 60 or 70 times.

Q. Was it only 20?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Would you say it was 40?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, he has not given us anything definite, it is nothing but an evasive answer. 15872

The Master: It is all I am going to let you get, because I do not think it is important enough to spend more time on it.

Q. Were you at the 21st Street and 99th Street plants and the Standard plant during the production of toluol by the United States Government?

A. I was.

Q. How often?

A. I do not recall the number of times.

Q. Can you approximate the number of times?

A. 30 or 40 times, I don't recall.

Q. Would you say it was 30? 15873

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you think 30 would represent the minimum?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Did you make any written reports of your visits?

A. I did not.

Q. Did you report orally to somebody in the company?

15874 George E. Woods, Cross.

A. I did not.

Q. In connection with your work, whom are you directly under?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Has Mr. Bradley given you any directions during the past year?

A. He has.

Q. When?

The Master: About what?

15875 Q. And about what?

A. Oh, I don't recall just now. He has given me directions about various things at various times; I don't recall just now what they were about.

Q. You have had conferences with him on important matters?

A. Oh, yes, all the time.

Q. You cannot state what they are?

A. No, they cover the general operations; I could not undertake to say just what they were.

Q. Have you discussed the sale of the 14th and the 42nd Street plants?

A. We have not.

15876 Q. Have you discussed doing away with the 99th and 21st Street plants?

A. Absolutely not.

Q. At any time during the last five years?

A. No.

Q. With Mr. Bradley?

A. No.

Q. Have you been asked to make a report upon the advisibility of doing that?

A. I have not.

Q. Written or oral?

A. I said I have not.

Q. Have you turned in any reports on it without being asked?

A. I have not.

Q. Are the monthly reports as to material used at the several stations of the complainant company made up from the manufacturing book?

A. They are.

Q. And that covers residuals produced, too?

A. Right.

Q. That statement?

A. Right.

Q. In other words, the report is based upon the 15878
showing here in the manufacturing book as to residuals?

A. Right

Q. And the same as to the temperature and barometric showings?

A. I don't think there are any reports made on barometric pressures.

Q. You don't think that gets into the monthly report?

A. No.

Q. Is there any employee of the company who is charged with the obligation or responsibility of finding out the accuracy of the reports made here in the manu- 15879
facturing book?

A. The accounting department checks the books at times.

Q. How often?

A. I don't know.

Q. Do they make any notations on the books to indicate that they have been over them?

A. Not that I know of.

Q. Is there any gas engineer under you, or under the direction of any officer of the company who is charged with the responsibility of going to the sev-

15880 George E. Woods, Cross.

eral stations and finding out there whether or not they are accurately and reliably making up this manufacturing book?

A. No, no gas engineer.

Q. You haven't any general inspector that might do that or decide that?

A. We don't need any.

Q. I am asking you about the fact?

A. I said we have none.

Q. Do you yourself ever go over the books, the reports and compare them with the underlying data
15881 out of which the manufacturing book records are made to determine the reliability of these figures?

A. I go over the books, the monthly reports, weekly reports, every week and every month.

Q. You go over them, do you check up the manufacturing book records and determine from your original sources of information the accuracy of these reports?

A. We have them checked in my office.

Q. When you say you have them checked, what do you check?

A. What do we check?

Q. Yes.

15882 A. We get a daily report of the operations indicated in that book, which comes down to the office, and those are checked every day, recorded in the book, and at the end of the month those daily reports are checked, are audited and checked, with the monthly report that is sent in from the station.

Q. You have such a book in your office where this is kept.

A. Yes.

Q. And one is for the 99th Street station and the other for the 21st Street station?

A. Right.

Q. And another one for Astoria, and another one for New Amsterdam?

A. We have for Astoria. We don't have the same book for the New Amsterdam Company.

Q. You don't keep the same kind of record?

A. No.

Q. Do you for the Standard and the Mutual?

A. I think about the same.

Q. And right in your office you have that compendium of information as to the results?

A. Right.

Q. Now, is there anybody charged with the direc- 15884
tion and responsibility to take either the daily or the monthly reports turned into your office and compare them with the sources of information out of which the manufacturing book records were made?

A. Oh, I say the accounting department checks them up, and we check these up from the report that is sent in every day, which in turn is checked with the monthly report from the station.

Q. Do you know that the accounting department goes into the manufacturing record at all?

A. They do.

Q. Are you sure of that?

A. Quite sure. 15885

Q. What makes you think that, have you seen them do it?

A. I haven't seen them.

Q. Do you know that they are directed to do it as a matter of routine work?

A. I think they have such directions.

Q. Did you say why the oil consuming record made by the oil meters in the generator houses is not used as a basis for recording the amount of oil used?

A. Because we check with our tanks.

Q. Is this machine unreliable, or this meter, that measures the oil in each case?

A. No, not necessarily so.

Q. Well, why is it discarded?

A. Because, what we are called upon to report on our books are our tank measurements. We use those meters simply for the purpose of recording the runs, the number of gallons that the gas maker may make per run.

Q. Isn't that a reliable way of measuring the oil, or are they unreliable?

A. It is fairly reliable, but they run sometimes fast or slow.

15887 Q. Is the information that appears on the daily reports of the gas makers, the gas makers' foremen, passed over, so far as the oil account is concerned which is shown by the meters?

A. Not at all.

Q. Because of any unreliability of the meters?

A. No, they are checked with the tanks; they check pretty closely.

Q. Why is it that the yardstick method of sticking this measure down through the little orifice in the top of some of these tanks which are imbedded in the ground, is adopted as against this mechanical apparatus indicating the exact amount of oil used?

15888 A. Because you can indicate what is in the tanks by the yardstick measure, whatever you may call it, and that is our supply, and that is our quantity, and it is checked by the tank measurement.

Q. Who does that?

A. The man—I do not recall the particular man who does it. There is somebody there that records those measurements every day.

Q. Don't you know what his title is?

A. No.

Q. Is he a laborer or gas maker?

A. No, he would be a mechanic of some kind whose job it would be to do that every morning.

Q. A mechanic?

A. Yes.

Q. Don't you know definitely who is charged with it in 99th Street and 21st Street?

A. No, I could not say.

Q. So we cannot produce the man who has been doing that for some years for cross-examination.

Mr. Ransom: I object to that. That assumes that only one man does it, whereas there are several men. There are three shifts a day.

The Master: Objection sustained.

Mr. O'Brien: Exception. 15890

Q. Have you got any feed tanks in the several stations we are speaking about that feed the oil to the gas making machinery?

A. Yes, we have at 99th Street.

Q. And on the feed turn isn't there a meter that indicates how much is being used?

A. There is a scale that indicates it.

Q. Are the measurements on that scale used?

A. They may be at times.

Q. Are they as a matter of practice?

A. They check up from them, they use them to check the meters also.

Q. Is there a written record made of that scale showing as to oil used? 15891

A. I think there has been at times.

Q. At times?

A. I am not sure whether it is taken all the while.

Q. Is there any record in the manufacturing book at any time?

A. I don't think it would be in the manufacturing book, no.

Q. Why is there not a feed tank feeding oil to the machine at 21st Street?

A. Because we don't need it.

15892 George E. Woods, Cross.

Q. Why do you need it in one place and not in the other?

A. Oh, simply a different application. One was installed at one time, and the application is somewhat different at the other.

Q. What do you mean by that, that there are different kinds of apparatus?

A. Different types, construction, et cetera. The design would not be exactly the same.

Q. When was the feed pipe put in on 99th Street?

A. A good many years ago.

15893 Q. Before the war?

A. Oh, yes.

Mr. Ransom: Before which war?

Q. Before the Civil War?

A. No, I guess not before the Civil War.

Q. Is the idea you are trying to convey to the Master that it is an old thing, and you just leave it there?

A. No, it was a system that has been in use there in the measurement of oil for quite a long time, and they usually pump the oil directly from the storage tanks into these distributing tanks, and from there into the generator house.

Q. How large a feed tank is that up at 99th Street?

15894 A. I do not recall the figures. There are two of them. I suppose they hold 1200 or 1500 gallons.

Q. Pretty large?

A. I have forgotten the exact size.

Q. Do you correct the showings of the feed tank for temperature?

A. No.

Q. You do not?

A. No.

Q. What do you do when the oil meters get out of order in 21st Street, where you haven't got any feed tank?

A. That wouldn't make any difference, we would use the other tanks, check up by the tanks?

Q. What do you mean by the other tanks now?

A. We have our regular storage tanks, which we check up. We have at 21st Street just a little different conditions. We have a meter on each machine that records the gallons used per run. We also have a master meter, instead of having the measuring tanks which you speak of, we have one master meter which registers all of the oil that goes into the generator house, and the readings at that particular place, hourly readings, are made from this master meter at the end of 15896
the day, and the master meter is checked up with the tank measurements

Q. What type of meter is this?

A. It is a plunger type of meter.

Q. Plunger type?

A. Yes.

Q. How long has it been in there?

A. Oh, I don't know; it is the same type of meter which the city uses for measuring the water which we purchase from them, the same character and type of meter. There are different types, the plunger and the diaphram type.

Q. How long has that been installed at 21st Street? 15897

A. Quite a long time, Mr. O'Brien; I don't know how long.

Q. Is it accurate?

A. The meter is taken out and repaired occasionally.

Q. It gets out of order sometimes?

A. Sometimes, yes.

Q. What do you do when it gets out of order?

A. Take it out and fix it, have it repaired.

Q. Meantime, how are you measuring your oil?

A. Checking up with our tanks.

Q. With the yardstick?

A. Yes.

Q. Down through the hole?

A. Yes.

Q. How often do you clean your tanks out for sediment?

A. I don't know how often, every two or three or four months.

Q. Every three or four months?

A. We might take them out every two or three months.

15899 Mr. O'Brien: I wish he would get out of that potential mood of his and give us some exact statement. That "might" or "may," may be something very definite and positive to the witness and not on the record.

Mr. Ransom: You let the witness frame his answers and you frame your questions.

Q. Did you ever get into the study of chemistry, Mr. Woods?

A. Did I ever go into the study of chemistry?

Q. Yes.

A. The gas chemistry, yes.

Q. Do you know much about it?

15900 Mr. Ransom: I object to the question.

Mr. O'Brien: Well, he catches what I mean. I do not ask the witness to characterize himself as being ill versed or well versed.

Q. How far have you gone into it?

A. Into gas chemistry?

Q. Yes.

A. I would not say how far.

Q. Have you made any pretense at knowing much about the chemistry end of it?

A. Well, I know something about it. You might

ask me some questions in chemistry and I will let you know.

Q. Have you got in the company trained technical chemists who take care of all of that kind of work and on whose judgment you rely?

Mr. Ransom: You mean other chemists?

Mr. O'Brien: No, I did not say others, because he has not characterized himself as being well versed in chemistry.

Q. Is that a fact, Mr. Woods?

A. We have chemists employed in the company, yes.

Q. Do you take their judgment on matters that involve chemistry? 15902

A. I may or may not. I may disagree with them.

Q. What do you do?

A. I may or may not. I may disagree with them.

The Master: What is the point of all this?

Mr. O'Brien: I am trying to get an explanation of this whole manufacturing book, your Honor.

The Master: I do not think these questions bring it out.

Mr. O'Brien: This is the foundation on which Teele's exhibit and Brundage's, and the rest of this Eiffel Tower has been erected, and if it is unreliable at the bottom it must fall. 15903

The Master: An objection will be sustained to the last question.

Q. Who makes these records here of the analysis, the inscriptions under the columns entitled "CO_2" and "111"?

A. I suppose they are made by the clerks.

Q. The works clerk?

A. Yes.

Q. Is he a technical graduate?

A. No.

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Q. He is just an ordinary young man that just knows how to read and write and a little arithmetic?

A. Oh, no, some of them are extremely good men and have been many years there.

Q. Does the works clerk make the analysis out of which he makes the record in these two columns?

A. No.

Q. Who makes those analyses?

A. The superintendent or assistant superintendent.

Q. Do you know?

A. They have made them.

15905 Q. You have not an assistant superintendent at 99th Street, have you? What are you calling him an assistant superintendent for?

A. Well, he is assistant superintendent there.

Q. It is the works clerk, is it not?

A. No.

Q. Has Mr. De Castro got an assistant?

A. He has.

Q. Who is he?

A. His name is Lewis Burkehart.

Q. You mean the man who is answering the telephone and reading the meters in the meter house?

Mr. Ransom: I object to the question.

15906 Mr. O'Brien: I am going to find out whether he made up his analysis right.

Q. Is he or is he not that man?

Mr. Ransom: I object to the question?

A. He is not.

Q. How old a man is Mr. Burkehart?

A. I should say about thirty.

Q. Is he at the 99th Street station?

A. He is.

Q. What place there?

A. Why, he is all over the place.

Q. You are not confounding him with the clerk in the office with De Castro?

Mr. Ransom: I object to the question.

A. I am not.

Q. Is he a graduate of a technical school?

Mr. Ransom: Who?

Mr. O'Brien: Burkehart.

A. No, he has been a student for many years at Cooper Union.

Q. Where does he make the chemical analyses that enable him to make records of this kind in the manufacturing book? 15908

A. In the works laboratory.

Q. Where is the works laboratory?

A. That would be made downstairs.

Q. Where is it, not where it could be?

A. The laboratory is in the office on the second floor.

Q. On what part of the second floor is there a laboratory?

A. Just across from the superintendent's office.

Q. And you say he goes into the chemistry of this thing and records it?

A. Oh, yes. It is a simple proposition. The clerk could do it just as well as he could. 15909

Q. Using a formula prepared by you?

By the Master:

Q. What is the process?

A. Simply an absorption process, to put 100 cubic centimeters of gas in a burette of some kind and for the purpose of taking out CO_2, which is carbon dioxide, would be to use potash, caustic potash.

Q. How long would it take to teach somebody to go through that formula?

A. You could teach a person in a week. It is sim-

ply a question of accuracy, after telling him what to do.

Q. Would you require a general education in chemistry to be able to do that?

A. You would not. No, your Honor, all you would have to do would be—I should say it this way, that a clerk, a young man who was thoroughly versed in the handling of the apparatus might be able to do the work more proficiently than a high grade chemist, because he would know what he had been doing, and the means of getting the material in, getting just
15911 the right amount of 100 CC for testing, whereas the chemist might know more about the theory of what is required and the young man would do the work just as accurately.

Q. In other words you would think it was a case where ignorance would be bliss; he would not follow any figures of his own but follow a fixed formula?

A. Follow a fixed formula.

By Mr. O'Brien:

Q. Mr. Woods, what does he mean when he records here under "CO_2," 3.5 for January 1, 1916?

A. That would be 3.5 per cent of CO_2.

Q. "Extracted"—what does that mean?

15912 A. That means in the gas tested at that time there were 3 1/2 per cent of carbon dioxide in the gas.

Q. What relation has that to the illuminating power of the gas?

A. CO_2 is a diluent and has no candle power at all. It is an inert gas the same as nitrogen might be.

Q. Does it take any candle power out of the gas?

A. It would tend to, the same as nitrogen would, and the same as oxygen would. Oxygen is a supporter of combustion, but oxygen in the gas does not tend to improve the illuminating value.

Q. Have you ever gone into that yourself?

A. I have.

Q. Have you made any experiments to determine how much it takes out?

A. Yes, many times.

Q. Where?

A. I would not say where. Many places and many times I have discussed the matter of CO_2, as to the effect upon illuminating value. There are various theories. Some say that—

Q. Do not lapse into some dream there.

Mr. Ransom: I object to comments of coun- 15914
sel.

Q. Where did you do it?

The Master: Objection sustained.

Q. What percentage of candle power does it take out?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Q. What percentage of the candle power, say as of January 1, 1916, would that 3.5 per cent of carbon dioxide take out of the resultant gas?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. O'Brien: Exception. 15915

Q. Do you take that out of coal gas too?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Do you use the same on coal gas too?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Does the same percentage obtain as a rule?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Isn't it generally known, Mr. Woods, in the

gas-making industry, that one per cent of the candle is taken out for every per cent of carbon dioxide?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: Is that based on the fact that the witness has not qualified as a chemist, your Honor?

The Master: I will not explain the ruling. The ruling stands.

Q. Has this any practical use, these two notations here (indicating)?

15917 Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Do you report them in your monthly reports?

Mr. Ransom: Objected to.

The Master: Same ruling.

Q. Can you explain the variations here, with the varying candle power?

Mr. Ransom: Objected to.

The Master: Same ruling. All these things are very interesting, but they are not pertinent to this issue.

Mr. O'Brien: This man has given expert testimony on the cost of making gas.

15918 The Master: Get to the point.

Mr. O'Brien: He has figures that he has given baldly, with out preliminary examination as to his qualifications in chemistry, without preliminary examination into his qualifications as a gas engineer, except the general statement of his being along with the company, and out of that he has built up, without giving you the actual cost of making gas, and has figured out from the manufacturing results of a number of years of the complainant company—has undertaken to give

you the hypothetical figure, building up, as it were, a Hindenberg line on top of a Siegfried line, to get away from the actual cost of making gas. But the defendants are not deceived by that process, your Honor.

The Master: I am not either. Let us get along to another question.

Q. Mr. Woods, have the weather notations here showing the thermometer and barometric records, the state of the weather, any particular significance; are they used by you or other gas engineers in the company in conjunction with the other records made in 15920 the manufacturing book?

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

A. Only as a matter of record. There may be times that we may want to know what the condition of the weather was at a certain time, and we record those things.

Q. Do you go over this gas made per day's labor when you go to the works? If you came in quickly into Mr. De Castro's office there, and you wanted to get a line on how things were running, what do you go to, to find quickly and in a short compass of time just how things are running? 15921

A. If I could take a run down through the plant, see how things are going, look around generally, I might look at their daily operation, their log book. That is, I would look where they are recording their hourly make, their make per run, oil per thousand, and I would simply look down to see what they are doing. I might not look at that book at all.

Q. There is a log book that shows the make per day?

A. It simply records the hourly make. We have a record of the hourly make, the oil used and the make

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per run. It is simply an operating condition, so that the superintendent knows from hour to hour what the operation is doing. It varies, goes back and forth. The summation of that records the daily operation.

Q. Do you ever personally go over the reports of the measurements of oil on the delivery from the barge?

A. I do not. I would not say that I did.

Q. Is that turned in at the works office by the men having charge of it?

A. They are kept there by them.

15923 Q. And they are recorded until the end of the month?

A. They are turned in by the man who does that. The superintendent or his assistant looks after it. I am quite sure that I do not.

Q. It does not come within the scope of your duties to find out whether or not the oil that you are paying for is delivered?

A. It does not come within my scope to—

Q. How much is delivered, whether it is the right quantity or not?

A. It comes within my scope, yes.

Q. Do you follow up the question of deliveries to

15924 the extent of knowing when the barge is there and seeing that some one takes charge of the measurements of the oil?

A. No, I do not.

Q. You do not go into those details?

A. No.

Q. You do not have the time to?

A. Absolutely I could not, Mr. O'Brien.

Q. You have too many things to do?

A. I have many things to do.

Q. How many hours do you spend at the Astoria plant on your way over?

Mr. Ransom: Objected to.

The Master: Objection sustained. We have had it three times.

Mr. O'Brien: It will not hurt, your Honor.

The Master: Yes, it will. You are wasting time.

Q. Mr. Woods, are there any tests made of the oil at the works?

A. Only tests for gravity.

Q. Who does that and when is it done?

A. Well, samples are drawn as we are unloading the boat for the purpose of determining the gravity. 15926

Q. Do they send them to Astoria?

A. They would send a sample there to the testing laboratory at Astoria for the purpose of getting a fractional analysis.

Q. You do not do any testing of oil in the works offices, or the works themselves?

A. No, only in so far as the determination of gravity is concerned.

By the Master:

Q. Do you test for gravity at the works?

A. We test for gravity, yes. It is a simple process of taking the small amount of oil in an elongated 15927 glass of some kind, in which you put an hydrometer as if you were testing the same thing—or as if they were testing milk, the specific gravity depending on how far this Beaume hydrometer will go into the oil. It is cooled down to a temperature of 60 degrees, they put this in, and it will read right off 28, 29, 30, 32, 34 degrees Beaume gravity of that particular oil or shipment.

Q. It does not require any special technical knowledge?

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A. Oh, absolutely not.

Q. That is done at the works?

A. That is done at the works, and they report the gravity of the oil as it is received.

Q. That is entered in this book, the manufacturing record?

A. Yes.

By Mr. O'Brien:

Q. After you used this Beaume hydrometer, you could tell there was 3 degrees there?

A. Yes, if we know the weight of the oil. 34 de-
15929 grees Beaume, which does not represent specific gravity. It is a Beaume hydrometer which is used for testing oil. Ten degrees Beaume—

Q. You average it up after you—

Mr. Ransom: Let him finish his answer.

Mr. O'Brien: I want to help him out.

A. And the higher the Beaume hydrometer the lighter the oil. For instance, you buy gasoline and they call it 68, 70, 72 degrees Beaume, which means that is much lighter than 28 or 30, or 32, and if it were down to ten the specific gravity of the oil would be exactly the same as the weight of water at 60 degrees temperature and 30 on the hydrometer.

15930 Q. This is only an average result that you get from the Beaume hydrometer?

A. Why, no, it is absolute. If the hydrometer is correct you get a reading.

Q. You just get the range between the high and low figures?

A. You do not. You get the 32 or 34 degrees Beaume, whatever the hydrometer may read.

Q. Do you make any other tests afterwards?

A. We make fractional distillation tests.

Q. Is there any specific gravity test other than the test you have just spoken of?

A. They probably make that same test at Astoria.

Q. Do you know whether they do or not?

A. No, I do not know. I should say that they do. My recollection is that they do in the sample sent over, that they test it for the specific gravity in the same way, and then they make a fractional distillation for the purpose of determining what fractions come off at different temperatures. There are times we make ultimate analyses.

Q. Are there many different gravities of oil?

A. There are many gravities, yes.

Q. What are they? 15932

Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained.

Q. How many gravities are there in gas oil?

Mr. Ransom: Objected to.

The Master: Objection sustained. Mr. O'Brien, a lot of these inquiries are very interesting to Mr. Edgerton, but they are not to me.

Mr. O'Brien: Your Honor will not wake up until later to the importance of this question. You have accepted a man's hypothetical testimony, testimony that was shut out by the State of New York, but that you have received here. I expect to show that this witness is not qualified either 15933 by the reliable method of recording the facts that he must know before he can gauge the importance of the reports, or by the reliability of the reports made to the office. Further, that he has not any technical knowledge; he has a general knowledge and he is dealing now in "may" and "might" and "probably," and "perhaps," and some more guesswork. That certainly goes to the question of the man's competency here as an expert on these subjects.

Q. Have you got with you, or are you able to state as of any day covered by the years in this manufacturing book for the 99th Street station, from January 1, 1916, down to date, how many men there were at any particular time working in that plant?

A. I have a record here during the week of a certain period.

Q. Do you state that the paper you are reading from refreshes your memory?

A. Yes.

Q. You would not be able to state what I have
15935 asked you without referring to that paper?

A. No.

Q. It covers what time?

A. During the week of January 1, 1918.

Q. January 1, 1918?

A. Yes, during that week.

The Master: Do not waste time checking that with this book, Mr. O'Brien. The witness already admitted this book does not accurately state all the men that work there.

Mr. Ransom: It does not cover all the classes of labor that there were.

Mr. O'Brien: I will ask the witness and close
15936 up on this matter.

The Master: Ask him one question.

Q. For that week, how many men were employed, according to your record here, in the boiler house?

The Master: Is this the first week in January, Mr. Woods?

The Witness: Yes.

A. Boiler firemen, there were two.

Mr. Ransom: How many are shown on the books there, Mr. O'Brien?

Mr. O'Brien: This has ten in the boiler house.

Q. Is that classes of labor of all kinds in the boiler house, as per the paper you have before you?

A. Yes.

Q. How many in the generator house?

A. We had one head gas maker, three gas makers, six firecleaners, and one man in the coal shed.

The Master: That is eleven.

Mr. O'Brien: Eleven, and it is one in the book.

The Master: What was it in the book, then, for the boiler house?

Mr. O'Brien: Ten.

Q. Purifier house now? 15938

A. In the purifier house there is one man on that day.

The Master: Are you talking about a day or a week?

The Witness: This was taken as of that week, your Honor.

The Master: For one day or for a whole week?

The Witness: It just took one day during that whole week.

The Master: What is Mr. O'Brien referring to here, one day or one week?

Mr. O'Brien: One day. It runs the same through the week, though, each day. 15939

Q. How many handling material—what they call handling here in the manufacturing book?

A. Just what they were doing—there were 16 laborers doing it that week; but just what they were doing I do not recall now.

Q. Where did you get that information from?

A. Right from the time books.

Q. That time book is still in existence?

A. It is.

Q. So that you had altogether how many men?

A. As of that date we had 60 men employed.

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Q. Sixty?

A. Sixty men.

Q. How do you explain that as against the record made here in the manufacturing book showing 14?

A. Well, I told you that those were not included. We have here one day foreman, one night foreman, two night foremen, two shift engineers at 48 3/8, one at 34-3/8; we had one oiler, two boiler firemen, one head gasmaker, three other gasmakers, six fire cleaners, one coal shed man, one ash driver, two tar men, one purifier house man, three governor house
15941 men, one coal shed elevator man, one coal weigher.

Q. Are you talking about 21st Street now or 99th Street?

A. I am talking about 99th Street.

Q. Are you combining 99th and 21st Streets?

A. One licensed crane operator and one fitter.

Q. One licensed train operator?

A. Crane. Two pipe fitters, one blacksmith, one carpenter, one reader, one mason, one painter, two helpers, three watchmen, two laborers, 21 cents, sixteen laborers, 27-1/2 cents.

Mr. Ransom: That is the first week of 1918?

The Witness: The first week of 1918.

15942 Q. Have you got a record there for August 5th?

A. I have not.

Q. Have you got any record for July or August of this year?

A. I have not.

Q. Do you know how many men were employed this year?

A. I know, but I cannot give it to you from memory.

Q. Were there any less than the summer of the other years, 1917 or 1918?

A. I should say about the same. I should say about the same, yes.

Q. Who handed you the time book out of which you took that sixty odd men's classification and number?

A. Who handed it to me?

Q. Who handed it to you, yes. Who is the man gave it to you or vouched for it?

A. I think it was brought down by the superintendent's assistant, Mr. Burkehart.

Q. And he said that was a time book for that particular time, did he?

A. Oh, I saw the time book. That was the time book, all right. 15944

By the Master:

Q. Irrespective of the time book, you are there off and on frequently, are you not?

A. I am, your Honor.

Q. You know about how many men you need to run a plant?

A. Absolutely, your Honor.

Q. In other words, would you say that time book is in accord with your own judgment as to the number of men were there at that time?

A. It is, your Honor, absolutely.

Q. In other words, you would not want to be held definitely to a particular number, but that is the definite impression that you have as of that date, 1918, of the number of men you had there? 16945

A. That is right.

Q. The various foremen, crane men, assistants, and so on?

A. That is right, your Honor.

By Mr. O'Brien:

Q. You are quite sure that is right, that you are correct on that?

A. Yes.

Q. When were you there, Mr. Woods?

The Master: Objection sustained.

Mr. O'Brien: I want to test his memory.

The Master: I will not permit that question.

Mr. O'Brien: Your Honor has put to him some questions on which his memory is very vivid and fresh. I want to test it.

Q. When were you there last, Mr. Woods?

Mr. Ransom: I object to the question.

Mr. O'Brien: I counted the men myself when I was there.

The Master: Tell Mr. O'Brien the number of
16947 men when you were last there. We are talking about 99th Street now.

A. Probably about three weeks ago.

The Master: Was the plant in operation?

The Witness: It was.

Q. Have you included in that list the men employed at 111th Street?

A. No.

Q. Have you included many men employed away from the station at 99th Street?

A. I have not.

Q. How many men were there at the time you were there last, approximately?

16948 The Master: Three weeks ago.

A. I would say somewhere between forty and fifty, or thirty-eight to fifty. I would not say exactly.

By the Master:

Q. Is this one shift?

A. No, that covers a twenty-four hour operation.

Q. At any time that you got there you would not find forty or fifty men?

A. No, sir.

Q. Wouldn't you find half of the total number for the day?

A. No, because nearly all the mechanical work or laboring work is done during the day shift.

Q. So you would not find those men at night there?

A. The night shift would be confined to a foreman and engineer of the house operators and boiler house operators, watchmen and men in the generator house, fire cleaners and men in the coal shed.

Q. How many men would you find there on the night shift, about?

A. That would depend. If we were running, say, two machines you would find about six, eight, nine or twelve, sixteen, seventeen or eighteen men. 15950

Q. But in the daytime in addition to a similar number of men you would find all these extra men?

A. You would have all your mechanics, carpenters, pipe fitters, and men cleaning up. They might be handling coal at the dock, bringing coal in, and all the repairs would be made and going on.

By Mr. O'Brien:

Q. Were there any repairs being made when you were last there?

A. The repairs are being made every day, Mr. O'Brien.

Q. I asked you were any repairs being made that day? 15951

A. They were.

Q. Where were they being made?

A. In the generator house, overhauling.

Q. Overhauling what?

A. Overhauling the generators.

Q. Which one of them was being overhauled?

A. I do not recall.

Q. Was it the one to the south?

A. I do not recall.

Q. How many gas makers were working there the day you were there?

A. If there were only two machines, two gas makers, I imagine now.

Q. How many helpers to gas makers?

A. Oh, there were probably three or four or five cleaners.

Q. Three or four? Who are they?

A. I do not recall; I do not know their names anyhow.

Q. Don't you say you visit there frequently?

A. Yes.

Q. You do not recall these faces or names?

15953 A. I might recall their faces, but I would not recall their names.

Q. You have De Castro in the office and one man assisting him, have you not—the day you were there?

A. Well, Mr. De Castro was there the last time I was there. Mr. De Castro shortly after that went to the hospital.

Q. And a clerk assisting him?

A. These men are out in the office.

Q. Just a minute, and follow me.

A. No, you said they were in the office.

Q. Follow me through the plant. You had De Castro and one clerk in the office; isn't that right?

15954 A. Probably.

Q. There was one man in the meter house that took care of recording the showing of meters, and of telephoning, doing several other things.

Mr. Ransom: I object to this line of testimony of Mr. O'Brien.

The Master: I will allow it.

Mr. Ransom: He is testifying to something when he was up there in July, during the vacation period.

The Master: No, as to what he saw three weeks ago.

15955

Mr. Ransom: But Mr. O'Brien is basing it on what he saw up there during the vacation period.

The Master: I do not care anything more about Mr. O'Brien's assertions of fact than I do about yours.

Mr. Ransom: His are being gotten into the record.

Q. That is true, Mr. Woods?

The Master: You saw Mr. De Castro and his assistant there?

A. Yes.

15956

The Master: You say you saw this man in the meter house?

The Witness: Yes.

Q. There was not anybody in the purifier house, was there?

A. I do not remember now whether there was. There was probably one man there, Mr. O'Brien, looking after the pumping.

Q. There were two men in the engine room, weren't there?

A. Yes.

Q. And two gas makers?

A. Yes.

16957

Q. And two or three assistants?

A. The fire cleaners that clean the fires and bring in the coal, there may have been three or four there.

Q. And how many men were bringing in coal?

A. I don't recall. Those men at that time were both bringing in coal and cleaning fires, probably four men.

Q. And there were about four men all told in the boiler house?

A. No, I don't think there were that many in the

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boiler plant. I think there were not more than two men in the boiler house.

Q. And how many men in the laboratory?

Mr. Ransom: I object to the question as impertinent and trifling with the Court.

The Master: The objection is sustained, the question is impertinent.

Q. How many handy men around?

A. I don't recall the number. A mason was working there with his helper.

Q. Where was the mason working?

15959 A. Probably on the machine.

The Master: Mr. O'Brien is now asking you if you picture certain men working there, not a guess, but do you recall the particular men you saw there?

The Witness: I don't recall every man.

The Master: Why didn't you say that ten minutes ago?

The Witness: I do not recall every man.

Q. What leads to these adjustments made in the figures from time to time in the manufacturing book, Mr. Woods?

Mr. Ransom: I object to the question.

15960 The Master: Which adjustments?

Q. It says here, "See adjustment on January 29th."

The Master: Go up there and look at that particular item that he has reference to.

Q. This is in the oil accounts?

A. I think that is the adjustment between the Standard oil measurements and the company's measurements.

Q. Do you know anything about it personally?

A. No, I did not make the figures.

Q. Do they ever call those matters to your attention?

15961

A. Oh, yes.

Q. Do you find discrepancies from time to time between what they say they give you and what some one reports to you as received?

A. Yes, we find differences between our measurements and theirs.

Q. Who takes that up and adjusts it, you or Mr. Carter or Mr. Addicks?

Mr. Ransom: That assumes that there is something for adjustment.

The Master: Who takes it up?

15962

The Witness: It is not taken up. We buy on Produce Exchange measurements.

Q. You say now it is not taken up?

A. No, it is not taken up.

Q. Didn't you just say there was adjustments made with the Standard Oil from the time to time?

A. No, I said there were adjustments made between our measurements and the Standard Oil measurements.

Q. How are they made, or who makes them?

A. There are variations at times between our measurements and the Standard Oil, Produce Exchange reports of what they send us.

Q. Who takes up with the Standard Oil, anybody at all?

15963

Mr. Ransom: I object to the question. It assumes that it should be taken up with the Standard Oil. When the company gets more oil it is naturally not very anxious to take it up.

The Master: Question allowed.

A. No, it is not taken up with the Standard Oil, because our measurements or receipts usually run over their bill.

Q. You mean your measurements usually show you are getting more than they bill you for?

A. A slight difference.

Q. Does that run into many gallons?

A. Well, it depends on what you call many, Mr. O'Brien. It does run into some thousands of gallons in a year's time.

Q. I want to ask you on the record here, Mr. Woods, do you know any time during the past 10 or 15 years at any time the Standard Oil Company of New Jersey sending you more oil than was shown on the vouchers?

A. I do.

Q. On what occasions?

15965 A. On many occasions. In the year 1918 there were a number of times.

Q. Was there a separate bill sent for the extra oil, or did they count that all in on the bills?

Mr. Ransom: I object to this.

Mr. O'Brien: Your Honor will recall when I had Mr. Addicks on the stand I tried to find out from him whether they were not getting a whole lot more oil than they were paying for, another way of covering up a reduction in the price of oil, or rebates. The witness now says that they get more oil than they are paying for.

The Master: You have brought that out.

15966 Q. Mr. Woods, taking this page as an example, can you explain to me the various figures put in here in the bottom line under the column in red ink? Here under the column headed "Anthracite, Pea and Dust, pounds," 213.85. What does that mean?

A. That I think is tons.

Q. What does this red figure of 2,684.69 at the foot of the column entitled "Coal pounds," mean?

A. That indicates tons I should say.

Q. Would you so explain the figure 364.52 under the column entitled "Total solid fuel in pounds"?

A. Yes, I should say that was right.

Q. What of this tar burns in pounds?

A. That converted into tons would be 360.55 tons.

Q. And that would indicate, if the figures given in this book are reliable, that would indicate the amount of tar, expressed in terms of pounds, and latterly in tons, used and burned in the making of gas at that station?

A. Used under the boilers.

Q. And what formula is used to reduce the 807,624 pounds of tar to 360.55 tons?

A. It depends upon the specific gravity of the tar. It would probably be about 8.33 times 1.07 or 1.08, 15968 depending on the specific gravity of the tar.

Q. You have a formula then I take it for reducing pounds of tar burned to tons?

A. Yes.

Q. What is the formula?

A. I have just said. We determine the specific gravity of the tar, just as we determine the specific gravity of oil, except in the case of the tar we use what is a heavy hydrometer instead of a light hydrometer.

Q. Is it Beaume?

A. Yes. The heavy hydrometer however is an instrument for determining the specific gravity of these 15969 liquids which are heavier than water. Using that hydrometer we determine the specific gravity, or the weight of the tar as compared with water, and that specific gravity will run anywhere from 1.04 to 1.09.

Q. How many pounds then of coal do you hold, in so far as keeping your records are concerned, to be equal to a gallon of tar?

A. It would depend upon the character of the coal. We get an evaporation of from 12 to 13 pounds on a good grade of tar, and we might get on—

Q. What kind of coal?

16970 George E. Woods, Cross.

A. I said we can get an evaporation with a pound of tar of from 11 1/2 to 13 pounds of water under good conditions. In other words, we can evaporate, we will say, 12 pounds of water for every pound of tar burned under the boilers. With coal it will depend upon the heating value of the coal, the character of the coal. It may run anywhere from 6 1/2 to 8 pounds.

Q. Would you say then for every gallon of tar you get the equal of 6 pounds of coal?

A. No, I didn't say that.

1597 Q. You have been mixing up gallons and pounds.

The Master: No, he didn't mix it up at all. I am not going to permit any further questions on it. The difficulty of the situation is that you are trying to listen to Mr. Edgerton and the witness at the same time. I have been watching this for several minutes. You can't listen to Mr. Edgerton and the witness at the same time.

Mr. O'Brien: I will listen to the witness, but I want him to give approximately, in whatever range he wants—

The Master: The witness has said that taking a certain quantity of water it will take about 12

16972 pounds of tar to evaporate it.

The Witness: No, the other way around. I said that one pound of tar would evaporate 12 pounds of water.

The Master: And that that same basis would require less coal in quantity than tar?

The Witness: No, that one pound of coal will evaporate from 6 1/2 to 8 pounds of water, whereas a pound of tar—

The Master: Will evaporate more water than a pound of coal?

The Witness: Yes.

The Master: A pound of coal will evaporate about 6 gallons—

The Witness: The heating value of the B. T. U. used in a pound of tar will run from 17 to 19 thousand B. T. U.'s. With coal it will vary anywhere from 9 to 12 thousand five hundred, or if you can get a good bituminous coal you will get more than that.

The Master: Let us get on to the next question. We have had enough of that.

Q. Mr. Woods, on the question of tar, that comparative statement as to the tar and coal would mean 15974
about two to one, wouldn't it?

A. It would depend upon the quality of coal.

Q. Well, taking an even quality of coal, it would be about a pound of tar would have evaporated—

The Master: An even quality of coal? Even what?

Mr. O'Brien: Fairly good; I will put it that way.

Q. A fairly good coal, a pound of tar would evaporate about twice as much water as a pound of coal?

A. If it were coal that would evaporate 8 pounds of water, I should say it would be about 1 1/2 times; if coal that would evaporate 6 1/2 or 7 pounds, it 15975
would be about 1.6, 1.65 to 1.7.

The Master: What will it average?

The Witness: It will average from—

The Master: Taking a good quality of coal?

The Witness: A good quality of coal, about one and one-half times, your Honor.

Q. And how many gallons of tar is there in a pound of tar?

Mr. Ransom: How many gallons?

A. A gallon of tar weighs more than a gallon of—it will depend upon the gravity of the tar. As I ex-

plained, a gallon of water will weigh 8 1/3 pounds, and a gallon of tar will weigh anywhere from 9 to 9 1/2 pounds, depending on the weight of the tar.

Q. Does the clerk of the works convert these terms into figures here in the manufacturing book?

The Master: Which figures?

Mr. O'Brien: The gallons of tar into pounds.

A. Yes, he probably is given the gravity of the tar and makes a conversion.

Q. And could you, taking this column, tell us about what the equivalent of this tar was in tons of coal?

15977 A. It would depend upon the character of the coal and what the particular gravity of that tar was.

Q. Haven't they got the transferring figure in the Public Service Commission?

A. No. That would vary from time to time. As I said, it would depend upon the weight of the tar, in the first place, and would depend upon the character of the coal.

Q. Assuming an even quality of coal and an even quality of tar, is there any variation?

A. No. If it were the same quality of coal all the while, and the same tar all the while, it would be the same.

15978 Q. And how would you take, say, this 807,624 pounds of tar, and tell us the equivalent in coal?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Q. Assuming a good quality of coal?

Mr. Ransom: I object to it.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you know the price that was put upon tar in 1918 for the purposes of making up your costs of manufacture at 99th Street?

A. I do.

Q. What was it?

A. 6 cents a gallon.

Q. The same at 21st Street?

A. Yes.

Q. The same at Astoria?

A. Yes.

Q. Did it vary this year? Is it more this year?

A. No, it is less this year.

Q. And was it the same in 1917 as in 1918?

A. No. It was less in 1917.

Q. Well, is this work done by Mr. De Castro or his clerk, the work of making the—first, computing 15980
the records as to residuals used, and then making that in the—recording it in the manufacturing book?

A. It would be done by the clerk.

Q. Well, is it in the practice done by him?

A. It is.

Q. And you have never checked those figures?

A. No, I have not checked any particular sheet, no.

Q. And when you make up your conclusions or deductions, so far as the cost of making gas is concerned in a given year, you assume the reliability of the figures as recorded in the manufacturing book?

A. I know from my own experience that they 15981
are reliable, and know what to expect under the conditions in which they are operating.

Q. Well, you assume their reliability?

A. No, I do not assume anything. I know from my own experience as to what to expect. If they are any different from that, I would make an investigation to find out.

Q. Well, have you ever found them wrong?

A. No, I have not found—I might find a few minor errors, yes. You might find a discrepancy of a ton of coal consumed or something of that sort,

which would not affect any material result in calculations that I might want to make.

Q. Well, where is the record kept of the coal that is sold or given away?

A. I have never known any to be given away.

The Master: Coal sold?

Mr. O'Brien: Yes, coal sold, right here in the book. They have it printed in the forms here, so apparently they expect—

The Master: Is there any entry in any column?

15983 Mr. O'Brien: Yes, right here. 38.86 tons sold, and it does not say to whom?

Mr. Ransom: That doesn't say anything about giving it away.

The Master: What do you know about giving away any coal?

The Witness: I never heard of any being given away.

The Master: What do you know about selling any coal?

The Witness: At times there are some of the screenings from which we are unable to make gas, those fine screenings that I spoke to you of a few times, that material has been screened

15984 from which you would get a pea coal, and that has been sold to the employees.

Mr. Ransom: Paid for?

The Witness: Paid for by them and sold to the employees.

Mr. O'Brien: Well, your Honor, we will see—

The Master: It was 38 tons of coal in one month, wasn't it, you had reference to?

Mr. Ransom: For which they could not have got anything else, but they got money for it.

Mr. O'Brien: Yes.

The Master: What month was that?

Mr. O'Brien: That was in January, 1918.

Mr. Ransom: That was the time when everybody was having such terrible difficulty in getting coal, and this—

Mr. O'Brien: Well, we will run it through in February.

Mr. Ransom: Well, that is another month.

Mr. O'Brien: March.

The Master: Well, how much in February?

Mr. O'Brien: 42.93 tons. 15986

The Master: And in March?

Mr. O'Brien: 48.

The Master: How many in April?

Mr. O'Brien: None in April.

The Master: How many in May?

Mr. O'Brien: May, 25.12 tons, coal sold for cash.

The Master: How many in June?

Mr. O'Brien: 29.22 tons sent to 111th Street station; 2.900 tons of buckwheat.

The Master: How many in June?

Mr. O'Brien: Coal sold, et cetera, three tons.

The Master: Three tons? 15987

Mr. O'Brien: 32 tons for cash and 47.22 of buckwheat sent to 111th Street. July 89.88 tons.

Mr. Ransom: Sent to?

Mr. O'Brien: No, sold.

Mr. Ransom: Sold to 111th Street?

Mr. O'Brien: S-o-l-d.

The Master: Well, is that other sold to 111th Street instead of sent?

Mr. O'Brien: In June, where I read 47.22, it does not say either sold or sent. It says "to."

The Master: What is the practice about that,

Mr. Woods? This coal that is marked as having gone to 111th Street?

The Witness: 111th Street is a holder station, your Honor, and they may be short of coal, and we transferred some coal from 99th Street up to 111th Street to run their boilers.

The Master: And in order to keep your records straight down there, you make an entry of it?

The Witness: Yes, and it is charged to that station.

15989 Mr. O'Brien: It is taken out of the coal here which is recorded as having been used.

Mr. Ransom: That is atrocious. It should have been so entered.

The Master: It is accounted for.

Mr. O'Brien: August 26.69 tons sold for cash; some word in parenthesis which I cannot read. 49.95 buckwheat, sent to 111th Street. September 1918, buckwheat to 111th Street station, 45.60, and then they have here a notation referring above to some slack, a notation, "To make up difference between New York Edison bill and 99th Street station, weight of cargo of boat A. A.

15990 Boyle sent to 21st Street, 14th Street and 99th Street."

Mr. Ransom: That is referring to buckwheat coal?

Mr. O'Brien: It is referring to slack.

Mr. Ransom: A slight quantity of buckwheat which came in under the Edison bill.

Mr. O'Brien: October, 1918, 27.93 tons of anthracite sold for cash, buckwheat coal to 111th Street 5.82 tons; November, 1918, buckwheat coal to 111th Street, 29.11 tons coal sold for cash 49 tons. December, 1918, 3 tons of an-

thracite sent to Innwood, 23.26 tons sold for cash; and January, 1919, 44.05 tons sold for cash.

The Master: That is enough; don't let's have any more of it.

Mr. O'Brien: Well, they run all the way through here, and it shows the ramifications of this gas business.

The Master: That is enough.

Q. Do you know whether in making your computations of coal used daily in the 99th Street or 21st Street stations, or at Astoria, there is any factor used 15992
for leakage or wastage?

Mr. Ransom: Leakage of coal.

Mr. O'Brien: Or wastage.

The Master: Of coal used?

Mr. O'Brien: For loss.

The Master: What do you mean by factor?

Mr. O'Brien: Factor.

A. You mean some allowance for wastage, and so forth.

Q. Yes.

A. There are times that we have to add a half of one per cent or one per cent in order to keep our stock intact as to question of waste coming over, and slight 15993
differences, and so forth; there are periods of time that we add a small amount of coal to keep our stock on hand in accordance with the books. As we weigh the coal it may be coming over a little short here and there, and there are discrepancies at times of a slight difference in bill of lading weights, and it requires about a half of one per cent, from that to one per cent, to keep the stock on hand intact.

Q. Well, that is then a co-efficient or factor that you use right through each year?

A. It varies from time to time. There are times that we do not have to do it at all.

Q. That would figure in the computations made by the works clerk?

A. He would have to make those allowances, yes in checking up.

Q. Is there some direction given to him as to what factor to use?

A. No. He keeps track of his coal pile.

Q. In other words, he evens up the used with the stock on hand?

A. Stock on hand, right.

Q. Where does he get the information to operate
15995 within his computation?

A. Well, he has his stock of coal on hand. If he sees that the weights are—the weights as turned in—that his stock on hand shows a slight discrepancy, he would probably add a ton.

Q. What do you know? Do you go into that?

A. Yes. Do I go into it?

Q. Yes.

A. Yes, I know what they are doing right along, and I know that these differences have to be adjusted in order to keep their stock on hand accurate.

Q. Well, does it average one and one-half per cent for each year, do you think?

15996 Mr. Ransom: He said one-half of one per cent to one per cent.

Q. Correct me if I am incorrect.

A. It may at times go to one and one-half per cent. I should say it would be about—from a half to one and one-half per cent. It would vary.

Q. You don't think it goes over that?

A. No, I don't think it will go beyond one and one-half.

Q. And this would show in the computations made by the works clerk, wouldn't it?

A. Well, I don't know whether it would show.

He might add one and one-half per cent, or one per cent.

Q. He keeps his computation sheets, does he?

A. Well, he makes—he keeps his sheets from day to day and records the use of the coal.

Q. Well, his computation sheets, does he keep his computation sheets?

A. No, probably not.

Q. Does he retain them with his daily record?

A. Not for an indefinite period, no.

Q. I did not ask you about any period. I asked you if he does or does not keep them, preserve them. 15998

A. I said not for any indefinite period.

Q. Well, for several years?

A. No, I do not think he will have them for several years.

Q. You do not think they would be up there?

A. I am quite sure they would not.

Q. Is he charged with the measurement of the coal?

A. No; he is not charged.

Q. Well, who does that; who takes stock of the coal?

A. The superintendent.

Q. Now, I want to know who—he supervises it. You don't mean De Castro goes out with a yardstick?

A. The probabilities are he would. 15999

Q. He himself?

A. He himself.

Q. And how does he do it?

A. Insofar as the large coal pile, it would be a question of measurement and calculation.

Q. How do they do it; that is what I want to know, all about how they do it.

Q. Insofar as what is being used in the regular operating shed, that is a matter of easy determination, week in and week out, because the contents of that shed is not very great, and we are not able to tell about the quantity that is in there.

Q. I know, but the shed is not always full?

A. No, it is not always full.

Q. You have a little pile there; how does he make his computation?

A. We make the computations based upon the measurement of the coal when we make them. We measure up the pile. A man may make several hundred measurements for the purpose of—

Q. I asked you when you are taking inventory of your stock on hand?

A. Yes.

16001 Q. How do you measure your coal?

A. We measure the length, breadth and the height of it, get the various elevations marked off in probably ten foot squares.

Q. You reduce it to conical shape?

A. Reduce it, if it is in conical shape, we would reduce it to a conical shape; if it were in a rectangular shape, we would make it of that shape. In other words, we make the calculations, whatever the shape may be, for the purpose of determining the cubical contents that the coal occupies.

Q. Do you know the particular man at either station that does that?

16002 A. I think Mr. De Castro does that with his assistant.

Q. Does it himself?

A. Yes.

Q. Who does it at 21st Street?

A. Why, I don't know. Probably the assistant superintendent. I should say that the assistant superintendent had charge of that work at that plant, checking that up.

Q. Well, now, the day I visited the 21st Street plant, they had a mixed pile of coal there near the holder?

A. Yes.

Q. And coke mixed in with it. Now, how would they set about that to measure it? How do they do it? Not how you would do it in the past, when you were in Evansville or Detroit or Little Rock, but what do they do in this company?

Mr. Ransom: I object to the question. It is an approved standard method of measuring coal piles, which even Mr. Edgerton ought to have heard of.

The Master: Objection overruled.

A. I told you they measured the length, breadth and thickness of the coal pile, if it was an irregular shape, 16004 they had to make those allowances.

Q. Well, did they trim it before they did this?

A. No, not necessarily.

Q. Well, did they do it?

A. No.

Q. They would not trim it?

A. No.

Q. Well, do you agree with Mr. Addicks in his statement that it is impossible to measure them?

Mr. Ransom: I object to the question. Mr. Addicks said no such thing.

The Master: I do not recall Mr. Addicks making any such statement. 16005

Mr. O'Brien: Well, your Honor—

Mr. Ransom: On the contrary, Mr. Addicks indicated definitely—

Mr. O'Brien: I can't put my finger now on the page, but I will do that to-morrow, the page of the record where we went into this matter.

The Master: You need not waste time doing it. I won't let him characterize the other testimony anyhow.

Mr. O'Brien: The question of the quantity of coal on hand at the beginning of the year and

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the end of the year, your Honor, is going to go vitally to the amount of coal used during the year.

The Master: That is a proper question, but I won't let him say whether Mr. Addicks is wrong or not.

Q. Do you know what they did, say last January, when they took stock at the end of 1918, what they did do, and if they did take an inventory at that time?

A. Just as I have described.

Q. Well, do you personally know how they did it

16007 at 21st Street?

A. Yes, I know personally how they did it.

Q. Were you there about the time they did it?

A. Yes, I was.

Q. At 21st Street?

A. Yes.

Q. When was it done?

A. Sometime in January, and again in March or April.

Q. What?

A. Sometime in January and March and April.

Q. Oh, three times?

A. It is done every three or four months. That

16008 is, insofar as the storage pile at 99th Street and 21st Street, they are using out of currently, which is the coal coming in and going out. We check it up at least once a week. The other is a pile that is not being used to any great extent, and the inventory of the stock of that is taken after the coal from that pile has been drawn on. If the coal is taken either from the storage, the open storage, or from the reserve shed, the amount of coal that has gone out is weighed, but that coal is also weighed and checked up as a matter of determining how much stock is still on hand.

16009

Q. Was any measurement made of the coal on hand at the end of the year, 1918?

A. I don't know that it was taken right as of the day January 1st.

Q. Was it made a day or two before or a day or two after the first of January, 1919?

A. It may have been? I am quite sure that it was not taken right at the first of January, because we were extremely busy at that time, and I do not believe the stock was taken during January.

Q. Do you think it went off until February before taking it?

16010

A. It may have lapped over a bit. It would not have made any material difference.

Mr. O'Brien: Wait a minute. I move to strike out. He has given to that question an answer mixing this caviar sandwich of hypothetical testimony with concrete facts.

Mr. Ransom: Let him finish his answer.

The Master: Next question.

Q. Were you there at 21st Street station in February or March, 1919?

A. I was.

Q. Then an inventory was made of the stock for 1918?

16011

A. I was there when they made that inventory.

Q. Were you there when they made an inventory at the beginning of the year 1918?

A. As I say, I do not think it was quite at the beginning of the year.

Q. I am talking now about 1918.

A. I was talking about 1918.

Q. When you gave the last half dozen answers, did you have in mind February and March of 1919?

A. No, 1918.

Q. What measurement was made of coal on hand

at the beginning of the year 1919, at the 21st Street and 99th Street stations?

A. I do not recall the date. It was in January or February that these measurements were made on the large piles.

Q. In 1919 also?

A. In 1919, also. The current piles are being measured and inventoried every week.

Q. Stick to the question I am asking you.

Mr. Ransom: I object to the comment of counsel.

16013 Q. Would you say personally that you know that there was a measurement not around January 1, 1919, but in Feburary or March or April, 1919, of stock on hand of coal at the 21st Street and 99th Street stations?

The Master: No, he didn't say that.

Mr. Ransom: He hasn't said anything of the sort.

Q. What did you say?

A. I said an inventory had been made of the stock both at 99th Street and 21st Street in the early part of 1919. I do not remember. I was present both at 21st Street and 99th Street during the course of that

16014 survey. I did not make the survey, but I saw them working on it.

Q. Was the coal trimmed before it was measured?

A. It was not.

Q. How was it measured?

Mr. Ransom I object to that.

The Master: Objection sustained. It has been fully covered.

Mr. O'Brien: He has not stated that.

The Master: I won't let him answer that.

Mr. O'Brien: He has stated that it was impossible to do it.

Mr. Ransom: He has stated—

Mr. O'Brien: Mr. Woods says they take the weight of it where they are using current supply brought in from the barges, but as to the stock on hand, he said they could not measure that. Now, he says they did make an inventory of it.

Mr. Ransom: He didn't say they couldn't measure it. Of course they measured it.

The Master: Objection sustained.

Q. How did you find this stock on hand in the early part of 1919, as you say, at the 21st Street and 99th Street stations? 16016

Mr. Ransom: Objected to.

The Master: How do you mean, "How did you find it"?

Mr. O'Brien: Found the measurements of it.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I would like to put that definitely on the record. It makes all the difference in the world—

The Master: I think the subject has been covered.

Mr. O'Brien: He says it was made, and he was there when it was made—

The Master: He says the pile was not trimmed, he said it half a dozen times. I won't allow any more questions on it. 16017

Q. Did you state anything as to the method by which the cubical contents of the pile was taken at the time you say it was inventoried?

The Master: Can you add anything more to what you have already said?

The Witness: I cannot.

Q. Did they used the area of the ground covered by the pile?

The Master: Objection sustained. He said they did.

Q. Was it rectangular in shape, this pile of coal?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien Your Honor, I am dealing with 21st Street now—

The Master: I don't care what you are dealin with.

Mr O'Brien: It is not in a shed it is open ground with a pile of coal, like that Himalaya mountain range that we were talking about in the early part of the case.

16019 The Master: And he has described generally how they measured the Himalaya mountains and got the cubical contents.

Mr. O'Brien: Exception.

Q. Was the same method used in 99th Street as at 21st Street?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. And were the measurements made at about the same time?

Mr. Ransom: Objected to.

The Master: Same ruling.

16020 Q. Is the same method adopted at Astoria, or have they got a coal storage shed there by which they can automatically measure off certain quanities of coal?

A. The same method was adopted and used.

The Master: Open ground?

The Witness: Open storage, yes, sir.

Q. Do you know who does it at Astoria?

A. Yes.

Q. Some engineer?

A. Yes.

Q. Who is it?

A. It is done by a man by the name of Joachum, a

civil engineer. He is an assistant in the mechanical department. It was also done by a civil engineer of the New York Edison Company for the purpose of checking up his measurements. I might say, Mr. O'Brien, that we have used about five millions tons of coal at Astoria since we started—

Q. Started what?

A. Since we started operations in 1906, and I think that our coal pile will inventory within one thousand or one thousand five hundred tons of the book value, when we have something like 120,000 or 125,000 tons of coal on hand. That variation may be 1,000 tons 16022
too much or 1,000 tons too little, but whatever the variation may be covers the period and the quantity of 5,000,000 tons used.

Q. Over there you have an engineer measuring it, and at 99th Street a clerk.

Mr. Ransom: Objected to. There is no statement that it is measured at 99th Street by any clerk. The testimony has been directly to the contrary.

Q. Do you know anything about Mr. De Castro's educational attainments, Mr. Woods?

Mr. Ransom: I object to that as immaterial. He has at least powers of telephone conversation 16023
when he is insulted.

A. Mr. De Castro has been with the company a long time. He has taken the educational class at the American Gas Association, and also spent three or four years, I think, at Cooper Union.

Q. Where is this educational class of the American Gas Association?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Is that a school?

The Master: Same ruling.

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Q. Or is it a correspondence method?

The Master: Same ruling.

Mr. O'Brien: Exception.

Mr. O'Brien: Your Honor, we are not taking for granted.

The Master: You cannot ask a question and then start to cross-examine on the answer. We will never get through that way. You asked him if he knew anything about De Castro's educational qualifications, or something like that He gave you an answer, and now you want to cross-exam-

16025 ine him on it. I cannot allow that. We will never get through.

Q. Well, you haven't a very large shed there at 99th Street, have you?

Mr. Ransom: Objected to.

The Master: Same ruling.

Q. What are the dimensions of the 79th Street?

The Master: The same ruling. I think we have had enough of this coal business.

Mr. O'Brien: I want to bring out that at 99th Street they are bringing the coal in direct for use from the dock.

The Master: I think we have had enough of

16026 it.

Q. Will it be fair for us to assume, Mr. Woods, that each year this inventory of coal is not made at the beginning of the year, or the end, but in February, March or April, as you have stated with respect to these two plants?

Mr. Ransom: Objected to.

The Master: Same ruling.

Q. How far back have you made a practice of taking these inventories of coal on hand at these stations?

A. We make them right along every year.

The Master: How far back?

The Witness: As far back as I can remember.

The Master: Next question.

Q. And you have been personally present with Mr. Joachum when he made the measurements at Astoria?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Did you go over Mr. Joachum's computations?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Did anybody besides Mr. Joachum himself verify 16028
his computation?

Mr. Ransom: Objected to as already answered.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do they keep a manufacturing book such as these books kept at 99th Street and 21st Street, at Astoria?

A. They do.

Q. And a record is made of all the things that are in this book, I mean the same categories are used?

A. Right.

Q. And a minute record made from day to day?

A. Yes. 16029

Q. It also has an account of days of labor?

A. No, I think not.

Q. Do they fill out these columns that are devoted to the number of day's labor?

A. I am not quite sure, Mr. O'Brien; I think not.

Q. They don't go to that trouble?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Did you direct them not to do is?

Mr. Ransom: Objected to.

The Master: Objection sustained.

16030 George E. Woods, Cross.

Q. Have they been omitted with your approval?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception. Your Honor, I assume that you do not consider these records here as of the same importance that I do. They are to my mind, exceedingly important in connection with this expert testimony. He has undertaken to give us here range of prices of labor and all—

The Master: Is there anything in that record showing the range of prices of labor?

16031 Mr. O'Brien: No, but the number of men.

The Master: Then the books are of no use to us on that.

Mr. O'Brien: The number of men.

The Master: The witness has said that the book is not accurate in reference to the number of men, so I must discard the books.

Mr. Ransom: Not complete, and does not cover the various classes.

The Master: The book is only useful to my mind in one direction and that is this: This witness has testified that it takes a certain amount of oil for a certain candle power. These books are

16032 useful as indicating the result of operations from day to day, and to show whether his testimony is in accord with those actual operations. He says it takes a certain amount of coal or coke to make gas, and fire the boilers. Those books are important as either confirming or disputing the statement made by the witness' based upon actual operations. Beyond that they are of no value.

Mr. Ransom: I assume that they are brought here by Mr. O'Brien on the theory of refuting the testimony of the witness. They were not brought here by the Company.

Mr. O'Brien: They have brought here and offered in evidence records that are presumably based on these books, indirectly, after the record goes through many hands into the clearing house at Irving Place.

Q. Do you know anything about the journal of the Company, the operating journal?

Mr. Ransom: I object to that.

The Master: Do you?

The Witness: No.

Q. Do you ever go into it?

The Master: Objection sustained. 16034

Q. Do you know that they do keep the journals?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Have you had recourse to the operating journal for any year in getting up the data of exhibits that have been offered in evidence since you went on the stand?

A. Yes, I think I have.

Q. To what extent, and in connection with what items?

A. In so far as the exhibits I have turned in?

Q. Yes, sir.

A. No—I would qualify that statement. 16035

Q. Do you furnish any data to the accounting department out of which they make up the journal entries?

A. I furnish them the engineer's report each month.

Q. And what other data?

A. The pay rolls which of course go through the journal entries.

Q. What else?

A. I think that covers it.

Q. If any witness states here that they depended upon a report from the manufacturing department

as to the entries, and the entries are not of the class that you have just mentioned, there is an error in the testimony, is there?

Mr. Ransom: I object to that question.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Will you think a few minutes and state whether there is any other information that is given by you or the men under you to the accountancy department out of which they make up journal entries?

Mr. Ransom: I object to the question.

16037 The Master: Do you recall any others just now?

The Witness: I do not recall any others just now.

Q. Are not the monthly entries in the operating journal showing coal and oil used made up directly from this book?

Mr. Ransom: I object to the question addressed to this witness as to the operating journal.

A. I don't know.

The Master: He says he doesn't know.

Q. Do the accountants work up the journal entries

16038 using the monthly reports that are made from these manufacturing books?

Mr. Ransom: I object to that. Mr. Brundage will be on the stand tomorrow we hope and answer those things.

The Master: Objection sustained.

Q. Do you make a practice of regularly going through the operating journal?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Well now, your Honor, I don't know whether you catch what is in my mind, but

here is the situation: We have got figures here on these exhibits presented since this witness went on the stand. They deal with costs, costs of labor, costs of material, value of residuals, commerical expenses, distributing expenses, and if the witness is going to say he doesn't pay any attention to anything except just the manufacturing end of it, does not go into the journal entries, yet has taken figures that have come from the journal and used by him, we ought to know.

Mr. Ransom: The witness has said that no exhibits which had been put in evidence here 16040
by him contain figures which were taken from the journal. Now, there are some exhibits which were prepared, copies of some of which were furnished to counsel for the defendant, but they have not been put in evidence. I have not undertaken to prove them by this witness.

Q. Mr. Woods, tell me how far you assist in making up the reports to the Public Service Commission of the complainants company and its allied companies?

Mr. Ransom: Objected to.

The Master: I will allow that.

Mr. Ransom: You mean so far as what this witness personally does? 16041

Mr. O'Brien: I don't want any alter ego; or some subordinate, I want to know what he does.

The Master: What do you do with the preparation of Public Service Commission reports, Mr. Woods?

The Witness: I personally have nothing to do with it. Under my direction there is a certain amount of information given to the accounting department in relation to plant capacities, etc., which go into the Public Service Commission reports.

The Master: What do you have to do with that?

The Witness: I might be interrogated, or it might be brought to my attention as to the figures that were being used, as to whether they were correct figures or not, in relation to capacity, and things connected with the operation, which would come under my department, and which would be referred to as to their correctness.

Q. In this report, Mr. Woods, there is a detailed statement made of coal used and coke used, and
16043 manufacture for the year covered by the report, residuals used, residuals sold, corrected make, registered make, send-out, unaccounted for gas, repairs to the work, detail repairs to the generator house, repairs to the boilers, and a multitude of various matters that relate to manufacture. Do you go over them as set up in the annual reports before those reports are signed by some officer of the company?

A. I do not.

Q. Do you go over any part of the details that I have just mentioned before Mr. Carter or some other officer swears to that report?

A. I do not. That is all a matter of record in the
16044 books from which they take it.

Q. Are you shown a tentative report before it is finally put in form for submission to the Public Service Commission?

A. No, only as to those parts that I spoke about. Not as to quantities and so forth. I have never checked them or gone through them.

Q. Renewals or replacements, do you cover that?

A. Not on the reports, no.

Q. Do you take the reports after it is made up and signed and check up any of the items?

A. No, I may look through it. I do not check up anything.

Q. Give us the practice and let us have this definitely so we will not have to go back to it.

A. I have said that in so far as the Public Service Commission report is concerned that there are some few things in connection with my department in regard to capacities, and so forth, which are brought to my attention.

Q. What are those things in regard to capacity and so forth? Let us have it definitely.

A. Well, plant capacities for one. The question might be brought up as to whether we have any withdrawals from the service. 16046

Q. Get out of that might or may business; I am tired of hearing that. Give us something that was or was not.

The Master: Do you remember any particular item that was called to your attention when the last report was made?

The Witness: I do not recall any particular item.

The Master: Do you recall any particular item of the 1918 report?

Mr. Ransom: That was the last report.

The Master: No, the 1917 report.

The Witness: I do not think any particular 16047
item was called to my attention.

The Master: Or the year before?

The Witness: No.

The Master: Then we have gone back far enough. Next question, Mr. O'Brien. Generally speaking, the report is not made up by you or under your direction and you have nothing to do with it?

The Witness: It is not, your Honor.

Q. When the Public Service Commission get into it and they call attention to various matters and they ask for further data, ask for explanations, particu-

16048 George E. Woods, Cross.

larly manufacturing details, is that customarily sent to you?

The Master: I will not allow the question. I will let you ask the witness whether on the 1918 report any special inquires by the Public Service Commission were brought to his attention.

Mr. O'Brien: I will adopt the Master's question.

The Witness: I do not recall anything at the moment, your Honor.

The Master: Do you recall anything in 1917?

16049 The Witness: No.

The Master: Or of the 1918 report, so far as you know?

The Witness: I do not recall it.

Q. Would you give the same answers to Astoria that you have to all my questions with regard to the Public Service Commission reports and their submission to you of the whole or any part thereof, and the reference to you of communications from the Public Service Commission, calling attention to matters in the annual reports submitted and asking for further information?

Mr. Ransom: I object to it.

16050 The Witness: I will let the witness say whether he will.

Mr. O'Brien: I have boiled down a number of questions into one.

The Master: I know you have.

Mr. Ransom: I do not see what the Astoria report has to do with this.

The Master: I will let the witness say.

A. I would.

The Master: What?

The Witness: I would give the same answer.

The Master: You do not recall anything special in the 1916, 1917 or 1918 reports?

The Witness: I cannot recall anything at the moment, your Honor.

Q. Mr. Woods, do you know who does get that together?

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I want to deal with the question of the reliability of these reports. They relate to manufacture.

The Master: I will not allow the question.

Mr. O'Brien: I want to use them and I want to talk to this witness.

Mr. Ransom: I will consent that anything 16052
by this company
of the Astoria Company to the Public Service Commission may be put in evidence here, if the whole report may be put in evidence.

Mr. O'Brien: I want to find out how much this man, charged with the particular responsibility of the manufacturing end of the complainant's business and of the Astoria Company's business, and of the Standard Gas Light Company's business, and the New Amsterdam's Gas Company's business—how far he knows that the reports sent to the Public Service Commission, sworn to by the officers of those companies, are 16053
reliable and conform to the facts as found by him in these companies.

The Master: I will have to draw my own inferences from it. He says he has nothing to do with marking them up; they are made up in the accounting department. In the last three years, which is as far as I have let you go, he has not had occasion to look at them, has not had occasion to be called on for any inquiry or any special information, and I would not let him say that they are reliable.

Mr. Addicks: Would your Honor say that Mr. Addicks or Mr. George Cortelyou, who signed his name to that report and said those facts were correct, a report required by law—that they would have advice of the manufacturing matters from this witness?

The Master: Not necessarily.

Mr. Ransom: The Public Service Commission asks for statistics and accountants' records.

The Master: I will not let him say whether it is correct or not.

16055 Q. Will you give the same answer to the years prior to 1916?

Mr. Ransom: Objected to as immaterial.

Q. 1915, 1914, 1913, 1912—back to 1905?

The Master: By that, Mr. O'Brien means, I take it, whether you have any recollection of any particular item at any particular time with reference to these reports?

A. I have not, your Honor.

Q. Did you make up these reports as to the manufacturing part, the manufacturing details which were submitted to the Public Service Commission, in any of the years prior to 1916?

16056 A. Prior to 1916?

Q. Yes.

A. Nothing any more than I have testified to, that there may have been some matters taken from the engineering department.

By the Master:

Q. Do I not get a correct impression of your testimony that the preparation of this report is an accounting department matter?

A. It is, your Honor.

Q And not a manufacturing department matter?

A. That is right.

Q. So it does not come within your department?

A. It does not.

Q. When that report is prepared they do not send for you?

A. They do not. They may send up, your Honor, to the engineering department to check up some matter that I would not know anything about.

Mr. O'Brien: Is it true, that it would not come to his department—

The Master: Except as he stated.

Q. If that is true that it would not come to your department except as you stated how do you explain 16058
this affidavit made by Mr. W. H Bradley in the report of the Astoria Light, Heat & Power Company, for the year 1918, which states, among other things, as follows:

"The data obtained and compiled by the accounting department of the respondent from the voluminous books and records of the various departments of the respondent"—

that refers to the first sentence of the affidavit—

"and your affiant believes the said data to be in exact accord with the following books and records: * * * The undersigned, W. H. Bradley, being duly sworn, says that he is the President of the Astoria 16059
Light, Heat & Power Company, that the foregoing annual report of the operations, affairs and conditions for the year ended December 31, 1918, is true, as he is informed and believes, that the sources of his information and the grounds of his belief as to the truth of the several matters not hereby stated to be verified upon his knowledge are as follows:

Schedule of matters not verified on deponent's knowledge, his sources of information and grounds of belief as to each such matter, the data obtained and filed by the accounting department of the respondent

from the voluminous books and records of the various departments of the respondent, and your affiant believes the said data to be in exact accord with the following books and records: Minute book, records of contract, voucher records, accounts receiveable ledger, accounts payable ledger, bills and statements from creditor companies, general ledger, operating ledger, construction ledger, sundry consumers' ledger, annual inventories, record of gas sales, annual report to State Tax Department, tax bills, reports from station superintendents, record of mains and services,
16061 reports from Bureau of Claims for Damages, original payrolls.

W. H. BRADLEY, President.

Subscribed and sworn to before me, a Notary Public in and for the State and County last above named, this 15th day of March, 1918.

Edgar S. Murray,
Notary Public.

The Master: You heard that affidavit, Mr. Woods?

The Witness: I have.

The Master: The question is how do you explain it?

16062 Mr. Ransom: I object to the question. Why is he called upon to explain it?

The Master: He is not called upon to explain it.

Mr. Ransom: This is a form prescribed by the Commission.

The Master: How do you explain it?

The Witness: I do not think there is any need to explain it, your Honor. We get records from

the station superintendents, which are turned into the accounting department.

The Master: Is that affidavit correct as you would understand it?

The Witness: As I understand it, it is correct.

The Master: Is there any explanation you want to make about it?

The Witness: I have no explanation to make.

The Master: The next question.

Mr. O'Brien: Your Honor very likely forgot the question asked of him. It was how he explained this statement, that these matters were 16064
not brought to his attention, and he did not know anything about it, except as he stated, when he is the chief of manufacture and assistant to Mr. Bradley, who signs this statement, and they say that Mr. Bradley is old and decrepit.

The Master: I will not permit any further inquiry on it. It does not require any explanation. It is not inconsistent with anything this witness has said. Mr. Bradley has sworn to this as president of the Astoria Light, Heat & Power Company, just as Mr. Cortelyou would swear to one for the Consolidated.

Mr. Ransom: Counsel has just made a state- 16065
ment which I am sure he would not have made if he had thought—that the complainant has claimed that Mr. Bradley, the most distinguished man in the gas industry in this country, is old and decrepit.

Mr. Honor: One minute. You want to say the man is superannuated and out of business, and when it comes to contesting his salary, he is working.

The Master: My ruling is that affidavit is

apparently correct in form, and is consistent in every way so far with the testimony of this witness. Mr. Bradley swore to that affidavit as President of the Astoria Light, Heat & Power Company. He says it is based on records.

Mr. Ransom: Not on memory, on records.

Mr. O'Brien: As to such matters he states, on information and belief, and those sources of his information are the books that are here.

The Master: That is printed form, is it not?

Mr. O'Brien: Well, there is one insertion.

16067 The Master: What is the insertion?

Mr. Ransom: It is the prescribed list of records.

Mr. O'Brien: The insertion is the language that I read beginning with the words "the data obtained and compiled by the accounting department of the respondent from the voluminous books and records of the various departments of the respondent, and your affiant believes the said data to be in exact accord with the following books and records." Of course, that relates to those matters that are not stated in the report to be true.

16068 The Master: I understand it. Let us get to the next question.

Mr. O'Brien: We know all about the Commission, although we were not eminent counsel connected with it in the year 1919, and especially in the wartime period.

The Master: Mr. O'Brien, please address your next question to the witness, and do not get into an argument with Judge Ransom.

Mr. O'Brien: Of course, your Honor, there is a question here as to who is going to be responsible. As I said to you early in the case, all we

want is for some man to go on the stand under oath and testify to facts, not to be jockeyed around from Mr. Aldrich to the testimony of Mr. Gawtry as to something, and Mr. Addicks as to something else, so that while we are going through the shell game we will have nobody on to testify to facts.

The Master: I have heard that speech many times, and I have heard that shell game speech several times, too.

Mr. Ransom: We have to put on only such men as know their own parts.

The Master: I wish Judge Ransom would re- 16070
member I have asked him not to make any speeches.

Mr. O'Brien: I am glad to know this is getting under your skin, and before I get through with you in this case it will get further than your skin.

Q. Were you consulted by anybody employed by the Astoria Light, Heat & Power Company before they set up their figures showing the cost of making coal gas and oil gas in the Astoria Company in the year 1918?

Mr. Ransom: I object to the question.

The Master: Set them up where? 16071

Mr. O'Brien: In the annual report made to the Public Service Commission.

The Master: I will allow it

Mr. Ransom: Exception.

A. I was not.

Q. I hand you that report and ask you if you yourself believe that the figures set up in that report are correct (handing to witness).

The Master: Objection sustained.

Mr. O'Brien: Your Honor, that is getting right down to an important matter here.

The Master: No, I am not going to let him characterize it at all.

Mr. O'Brien: But he has not come in here with the original data showing what the actual cost was in either case, either the complainant company or its offspring, the Astoria Company—

The Master: Let me interrupt you a minute, Mr. O'Brien, you will have in mind that you are asking him this question, "Will you swear that that report is correct?" Is that right?

Mr. O'Brien: No, the question was whether the
16073 man who made up the report—I am not conceding the accuracy of that report; I am trying to find out whether somebody responsible for that consulted—

Mr. Ransom: Mr. Bradley, the president swore to it.

Mr. O'Brien: Consulted with him as to the costs of making coal gas and oil gas during the year 1918, in the Astoria Company.

The Master: He said he did not. Now, you want to see whether the figures stated in there are in his judgment correct—is that what you want?

16074 Mr. O'Brien: That is what I wanted, yes.

The Master: All right, I will let him say it, but I am going to hold you to it.

The Witness: In my judgment they are correct.

Q. What did you look at when you went through the pages?

A. I was just looking through it generally.

Q. Name the pages you looked at before you said in your judgment it was correct. What are the figures you are looking at?

The Master: Just give the page numbers you are looking at.

16075

Mr. O'Brien: Do not get excited, Mr. Woods, but just name the pages and the items.

Mr. Ransom: Mr. O'Brien is the only one excited so far.

A. Page 68 and page 69.

Q. Just a minute now before you turn that page 68 or 69. What are the figures that you read there?

The Master: You are going to get the pages before you go to the next question.

Mr. O'Brien: He had not had time to read one line.

16076

The Master: We will get the pages that he looked at.

Mr. Ransom: Give all the pages that you looked at.

The Master: Mr. Woods, to cut this short, it does not make much difference how much you scrutinize or read that report; you believe it is correct, do you not?

The Witness: I believe that is absolutely correct, your Honor.

Q. You believe that because Mr. Bradley signed it and turned it in?

A. I do, because I know the company would not turn in anything except with the correct figures.

16077

Q. You did not intend to go through and analyze the figures, did you, as you cursorily went through the books?

A. I did not.

Mr. O'Brien: I wish to show your Honor an affidavit in connection with this lack of frank disclosure.

The Master: I will not take up anybody's affidavit until this witness's examination has been finished. I will not take any more until this witness is excused.

Q. Mr. Woods, getting back to the specific gravity of the oil, has your company paid for oil of nominal 34 degrees gravity several hundred thousand dollars more than for the 28 degrees specific gravity.

Mr. Ransom: I object to the question as not a matter concerning which this witness has been interrogated.

The Master: Objection sustained.

Q. I will go back and ask you, Mr. Woods, if the reports of the specific gravity are turned into you?

A. They are turned into the engineering office, yes.

16079 Q. And do you get a line on all of the deliveries of oil as shown by these reports and take up the question of whether they conform with the contracts made with the Standard Oil Company of New Jersey?

A. I get a report of all oil shipments to the different plants.

Q. Do you take up the question as to the substance of the reports to determine whether the contracts have been complied with?

A. I do not gather what you mean.

Q. Do you find them always 34? Are they not oftentimes 28 degrees?

A. I find we are not always getting the same

16080 gravity.

Q. It will run from 48 or 46 to 20— would represent the range, would it not?

A. It would not.

Q. Is that matter fresh in your mind, Mr. Woods? Could you recall a series of years now? This matter of the specific gravity generally as shown by these examinations?

A. Oh, that I cannot recall. I do not think I can recall specific shipments, but I can recall what our shipments usually are, yes.

Q. Well, in the former case wasn't it shown that

the range ran from 36 to 40 degrees, or I mean from 46 to 20 degrees.

Mr. Ransom: I object.

The Master: Objection sustained.

Q. Will you say that there has not been any range of variation in the specific gravity of the oil delivered to the complainant company since 1905?

Mr. Ransom: I object to the question.

The Master: I will let him answer.

Mr. O'Brien: Someone has got to make good on the question of whether they are getting what they are paying the Standard Oil Company of 16082 New Jersey for, your Honor.

The Master: I allowed the question, didn't I?

Mr. Ransom: It is shown by the Produce Exchange report.

The Master: What was the last question?

(Question read by the stenographer.)

The Master: From 26 to 40, wasn't it?

Mr. O'Brien: 46 to 20.

The Master: 46 to 20?

A. I do not recall ever having received a cargo as low as 20 degrees.

Q. Will you say about what the ranges are, then, as you remember them? 16083

A. I should say from 28 to 40 or 42.

Q. Well, is this a matter of price?

The Master: Would it run up as high as 46, that you recall?

The Witness: I do not recall anything as high as 46, your Honor.

Q. Well, these tests as I recall it now, were made at Astoria, outside the—

The Master: No, he said the specific gravity tests were made at the works.

Mr. O'Brien: No, not the complete tests, your Honor.

Mr. Ransom: Absolutely.

The Master: The specific gravity tests were made at the works. I will not let him go into that again.

Mr. O'Brien: Be that as it may, works or Astoria—

Q. The reports come into you and they show this range. What do you do when you get a report showing that they are not receiving 34 degrees specific gravity oil, as per the contract.

Mr. Ransom: I object to the question. It as-
16085 sumes a lot of things for which there is no foundation.

The Master: I will allow it.

Mr. O'Brien: You can see, your Honor—

The Master: I allowed the question. Mr. Woods says he recalls as high as forty or forty-two. Now, that is more, isn't it, than the contract calls for, or don't you know?

The Witness: I have seen the contract, your Honor.

The Master: Well, now, when they run higher than the contract, what do you do?

The Witness: Don't do anything. They noti-
16086 fied us that they would like us to try a litte higher gravity oil, and we said we was very glad to try it.

Q. When did they notify you that?

A. Oh, to the best of my recollection, the high gravity oil we received in 1917.

Q. Was this a letter that came to you?

A. No.

Q. Or was it a letter to Mr. Carter?

A. The letter came through Mr. Addicks.

Q. Mr. Addicks?

A. Who looks after the oil situation.

Q. You recall that there was such a letter?

A. I do not recall that there was such a letter. There was—whether it was a letter or by telephone, or some communication, I can't remember.

By the Master:

Q. Well, outside of this instance when they asked you to try a high gravity oil, do you remember the high gravity oil being delivered generally?

A. No. We probably had several cargoes at that time, your Honor, outside of that.

Q. I mean outside of that?

A. I don't know. I do not recall that. 16088

Q. What was the range, excluding this particular instance, now?

A. From about 28 to 34 or 35.

Q. 28 to 35. Was there ever an instance that you recall, now, where the range ran higher than that except for this instance of 1917, when you were asked to try a higher gravity oil?

A. There might have been a possible cargo of 36 or 37. I cannot recall all these cargoes, your Honor. There may have been one cargo about 35 or 36, but the general range—

Q. Don't tell us what might have been. Give us your best recollection now, and if you do not recall 16089 it say so.

A. I do not recall that, your Honor.

Q. You recall this one that ran 40 to 42?

A. I do.

Q. Two or three shipments of it?

Mr. Ransom: Two or three cargoes.

The Master: Isn't that the same thing?

Mr. Ransom: Well, shipments might be a little different than cargoes.

Q. But you recall that you were asked to try out the higher specific gravity?

A. I do.

Q. Did you like it, was it useful to you, as good as the other?

A. It was.

Q. Did you so report?

A. I think I so reported to Mr. Addicks.

Q. That it was just as useful to you as the 34?

A. Right.

Q. Well, did you continue to get the 40 degrees, then?

A. No.

Q. They went back to 34 anyhow?

16091 A. They did.

Q. Do you know why?

A. No.

The Master: Next question.

By Mr. O'Brien:

Q. Well, did Mr. Addicks communicate with you on this matter of trying out this highest specific gravity or not, in writing or was it an oral conference you had with him?

A. It was oral.

Q. Did he say that he had received a letter from the company?

A. I do not recall.

16092 Q. Well, in substance, what did he say? Give it a trial?

A. Yes.

Q. Did he express his views as an engineer about the results that you might develop out of it?

A. Yes, I think we discussed it generally, that it would probably be a little better for us.

Q. Looked for a greater efficiency, did you?

A. Yes, thought it would be somewhat better.

Q. Was this during the wartime period?

A. It was.

Q. When the price of oil was going up?

The Master: What part of the year 1917 was that?

The Witness: I cannot recall the exact time, your Honor.

Q. And where did you try it out?

The Master: Are you sure it was in 1917?

The Witness: I am not quite sure of that. Either 1917 or 1918.

Q. Oh, come within a month of it, can't you? Can't you fix the time within a month or two?

A. I would if I could, Mr. O'Brien. I really can't.

Q. Perhaps the book would refresh your memory? 16094

A. Right.

Q. The manufacturing book for 1917, 99th Street plant?

The Master: Do you remember where it was used?

The Witness: I think possibly I can locate it. Here it is.

The Master: That was in June, 1917. That is an average of 41.

The Witness: Yes, 41.

Q. And did you find that you got a greater efficiency by 41?

The Master: Wait a minute. 16095

Mr. O'Brien: I thought you might ask him that while you had that page there, and we would nail it while it is going.

The Master: Wait a minute.

By the Master:

Q. You have looked up April, May and June, and you find that cargo in June about 41, don't you?

A. Right.

Q. Anything in July at 41 or thereabouts? What was the highest in July?

A. 34.

16096 George E. Woods, Cross.

Q. What was the highest in August?

A. 33.

Q. What was the highest in September?

A. One of 38.

Mr. O'Brien: How do you account for the variations between that record in June, 1917?

The Master: One minute.

Mr. O'Brien: At 99th Street?

The Master: One minute.

Q. What was the highest in October?

A. 34.

Q. What was the highest in November?

16097 A. 36.

Q. Going back to your general shipments—

Mr. O'Brien: Maybe it was in some other year.

Q. Going back—

Mr. O'Brien: Does that refresh your memory?

The Master: I am asking a question.

Q. Going back to the June shipment of 41, will you tell us what your record shows as to the efficiency of that cargo?

A. Just about the same as the other oil.

Q. It ran as to candle power 24.19, 23.04, 23.08, 23.06, 23.96, against, taking the opposite figure, 24.19, the oil there was 3.69; 23.04 was 3.77; 23.08 was 3.76;

16098 23.06 was 3.83; 23.96 was 3.78, is that right?

A. Right.

Q. That you say would run about the same as the lower gravity oil?

A. Just about the same.

By Mr. O'Brien:

Q. Well, Mr. Woods, when you get down below 34, how about the efficiency of the results, or rather, the efficiency of the oil?

The Master: I think we have been all over that, haven't we?

16099

Mr. O'Brien: No, when you get down below 34 we haven't.

The Master: I thought we had that some days ago. I am quite sure we did. I will let the witness answer that question.

A. From 28 to 34 there would be no difference with the same grade of oil, same character of oil. You understand oil will vary, and the 34 oil might be an extremely bad oil as well as a 28 oil. If it was very badly cracked, the 34 might be bad, for instance.

Q. What do you mean by cracked?

A. A cracked oil, where it is the result of high pressure distillation whereby you get oils that run into the benzol series, so that if your heats are too low, you make a gas that does not hold up, and if your heats are too high you crack these benzol series into lamp black and carbon. I testified to that one day before, your Honor.

16100

Q. Mr. Woods, you are affirming your belief, are you about the efficiency between 34 and 38?

Mr. Ransom: I object to the question.

A. It depends on the quality of the oil.

Q. In other words, sometimes if you had some oils and they were 28 degrees they would be of much inferior quality to 34 degrees?

16101

A. That might be so.

Q. When the company specifies 34 degrees in their contract that is what they want, isn't it?

A. Yes.

Q Have you ever made any claim against the Standard Oil of New Jersey for rebates based upon the fact that you have not been delivered 34 degrees oil?

Mr. Ransom: I object to that as not cross-examination of this witness.

The Master: I will let this witness say whether he ever did.

Mr. Ransom: Whether he personally did.

A. I never did.

Q. Has the company?

The Master: If he knows.

Q. If you know?

A. I don't know.

Q. Have you turned in reports to Mr. Addicks, to Mr. Carter, the president of the company, to Mr. Bradley, to the effect that you were not getting the results out of the oil because of the lower specific gravity than was provided for in the contract, to wit, 34

16103 degrees?

A. I have.

Q. Do you preserve these reports of the analyses of the gas oil to determine their specific gravity?

A. We do.

Q. Can we, if we want to check up the specific gravity as shown in the manufacturing books of the several stations get the reports in your office and find there the whole period that is covered by the manufacturing books?

A. Either in my office or in the chemist's office, yes.

Q. The chemist is who, the late Dr. Love?

16104 A. Yes.

Q. Has he got an office in the main office building?

A. Yes, he did have.

Q. Did he keep on file the records of each chemical analysis of the gas oil from 1905 on?

A. I don't know just what he has kept. He had not been with the company for that length of time.

Q. From the time he was with you—when did he come with you?

A. I should say about 1910.

Q. Prior to that time were the results of these analyses kept in your office?

Mr. Ransom: Before that he was with the city.

A. They were kept by Dr. Elliott who was the chemist at that time.

Q. Is that the Elliott that created or invented the Elliott lamp?

A. It is.

Q. Have you used the Elliott lamp in making these tests of candle power at the 99th and the 21st Street stations?

A. We do.

Q. Do you use any other method of determining the candle power? 16106

A. Yes.

Q. What is it?

A. We check up with candles.

Q. Not all along?

A. No, we check up the lamp every day, standardize the lamp by using sperm candles in checking up the lamps.

Q. You mean you standardize the Elliott lamp, don't you?

A. We do.

Q. But you use the Elliott lamp in all the tests, don't you?

A. Except the times we standardize the lamp. We 16107 check one with the other.

Q. And then these tests that are shown in the manufacturing book are the results of your experience with the Elliott lamp?

A. Oh, no, we check the Elliott right along with candles.

Q. Have you made a direction to the superintendents of the stations telling them they must do that regularly?

A. That is right, they do.

Q. Have you made a book of rules to guide these men in the stations?

16108 George E. Woods, Cross.

A. No.

Q. Do you just give them directions from time to time and let it go at that?

A. We give them directions from time to time.

Q. Don't you keep bound in a book or in a file preserved the records of the directions you give your superintendents from time to time?

A. I do not. We may have letters giving directions.

Q. Where are they, do you keep them together?

A. No.

Q. Where are we going to find what Mr. De Cas-
16109 tro's directions are as to how he is going to run that plant?

A. I don't think you will find them.

Q. Why.

A. Because we haven't anything on record as to how he shall run the plant.

Q. Was this an oral or written direction that he was to use the Elliott lamp?

A. Probably oral. We have meetings once a week where we discuss all these matters, and most of these directions, etc., are given as of these times, during discussions on all sorts of subjects.

Q. Where are those weekly meetings held?

16110 A. At Irving Place really.

Q. In the restaurant?

A. Sometimes, yes.

Q. And over the *demi-tasse* you discuss operations and efficiency methods, do you?

A. We do.

Q. And these are held every week are they as a regular thing?

A. Not every week. I will qualify that. Sometimes every week and sometimes every other week.

Q. Do you bring in the men of the other plants, the allied companies?

A. We do.

16111

Q. A gathering of how many engineers, 25 maybe?

A. They are usually made up of about 15 men.

Q. Do you bring in the utilization department attaches?

A. No.

Q. You think it was at such a meeting as that it was agreed that you would use the Elliott lamp?

A. Oh, I would not say that.

Q. Well, it has been in use for many years?

A. It has been in use quite a long time, yes. We had at first a 10 candle power unit, which was not satisfactory, and which was afterwards changed to 16112
a 5 candle power unit. We found that the most satisfactory standard that we could get. We have used the Pentane lamp. That is a 10 candle power standard unit. Pentane oil is used. The Pentane is satisfactory except in warm weather, on account of the oil being so volatile it is extremely hard to work and extremely dangerous. We have found that the 5 candle power Elliott lamp is the most satisfactory standard that we can get. It is something that is quickly operated and easily handled.

Q. It serves your purpose better than any other test?

A. For our works operation, checking up every day 16113
with candles it has been the most satisfactory thing we could find, the 5 candle power Elliott standard.

Q. Did you have the Pentane before that?

A. We have Pentane lamps now. We check up the Elliott lamp at times with the Pentane. The Pentane is a 10-candle power standard.

Q. Have you got any other standards?

A. No, except the standard candle which is prescribed by law, burning 120 grains of spermaceti per hour.

Q. Isn't that the best standard?

A. I would not think so.

Q. It takes a longer time?

A. It takes a longer time. There is as much a variation of candles as any other standard. It was the old English standard of the English sperm candle which was burned at the rate of 120 grains of sperm per hour. That was the standard for many years in England. It was afterwards changed, owing to its unreliability, and difficulty of operation, and the 10-candle power Pentane lamp was adopted. However, that has since been disgarded for the B. T. U. standard. We are one of the few places that are operating on
16115 a candle power standard, and New York City is the only part of New York State that is operating under that.

Q. I don't want to shock his modesty, but have you used the Edgerton standard?

A. The Edgerton standard is a screen, it is no particular standard. The Edgerton screen is a Bunsen burner with a slot in the side, in which you use a gas with which to test another gas. If the gas should vary the standard varies. The Edgerton standard is not used to any great extent.

Q. Well, it is good enough to be used by a number of companies around New York, isn't it?

16116 Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Don't you know it is used by a number of companies around New York?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Woods, do you know to what extent the Edgerton standard is used?

Mr. Ransom: Objected to.

The Master: Same ruling.

Q. Don't you know it is used at Harvard University?

16117

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Don't you know it is used in the Lighthouse Board?

The Master: Same ruling.

Q. Are you acquainted with the tests that are used by the other companies in and around New York?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Mr. Woods, have you ever compared the records of the two stations here for a given period? 16118

A. Yes.

Q. If they differ, how would you explain their variation?

The Master: Objection sustained.

Q. Is one plant older or more antiquated than the other?

The Master: Objection sustained.

Mr. O'Brien: You want it more specific, I assume.

The Master: You are a good guesser sometimes.

Q. When you were looking up a minute ago that 41 degree specific gravity, and you delved into June, 1917, you found there figures of specific gravity different for the same period as 99th Street. How would you explain that? The oil comes from the same deliveries doesn't it, as a rule? 16119

A. I don't get the question.

By the Master:

Q. How does it happen that at this particular time, in June, 1917, you got one character of oil at 41 degrees gravity at one plant, and you didn't get the same gravity at another plant?

A. My recollection now is that the Standard Oil Company had one or more cargoes of that grade of oil which they asked us to try out.

Q. Why didn't you divide it between the two plants?

A. Well, if it came in a cargo, like a tank full, we would prefer trying a thing of that sort out at 99th Street rather than going to a larger station.

By Mr. O'Brien:

Q. Because it is a smaller station?

The Master: Objection sustained.

Q. Now, as to other figures that show efficiency,
16121 Mr. Woods, in the manufacturing books?

The Master: Show him the figures.

Q. Well, I will come back to that. When the Master asked you as to the results, that means as far as efficiency was concerned from 41 specific gravity oil, what columns did you look to to determine the efficiency of a given specific gravity?

A. The oil used and the candle power per gallon.

Q. Is that all?

A. That would be candle power. You can get the candles per gallon without knowing the candle power. The candles per gallon alone would tell you as to the efficiency.

16122 Q. Is there any way in which you can take the manufacturing book here for a given month, of both stations and make comparisons of the two as to the efficiency derived from the oil furnished by the Standard Oil Company?

A. You can get a comparison as to the efficiency of the two plants, yes.

The Master: What is your point, Mr. O'Brien? Does the 21st Street station show a greater or less efficiency?

Mr. O'Brien: I want to find out from him whether he can point to the figures at the sta-

tions, and, making comparisons, give us some idea of the efficiency of the two plants.

Q. Is there any difference so far as the ten years are concerned, in the efficiency of these two plants?

Mr. Ransom: In respect of what? I object to the question as altogether too vague.

The Master: Objection sustained.

Q. Are they of equal efficiency so far as oil and coal are concerned?

Mr. Ransom: I object to the question as still too vague if he wants to direct his attention to any specific figures, I have no objection to it. 16124

The Master: What is 21st Street; water gas?

Mr. Ransom: Both are water.

The Master: What do you mean, Mr. O'Brien, that they apparently got more candle power per gallon of oil in 21st Street than they did at 99th Street?

Q. In the 99th and 21st Street plants, will the oil that has been used of a given specific gravity, produce the same result?

A. Using the same character of coal and coke, under the same conditions, yes.

Q. Is it fair to assume that at a given time the quality of the coke and the coal would be about the same? 16125

A. Well, it is fair to assume that they may differ. Just how much we do not know. There are no two carloads of coal that run exactly alike.

The Master: Tell me this, Mr. Woods. I am looking at the 21st Street station, June, 1913. It shows here works tests ranging around 17. The candles per gallon appear to be about four and a fraction. That seems to be very much poorer than at 99th Street.

16126 George E. Woods, Cross.

The Witness: That was after toluol extraction, your Honor.

The Master: That was after the toluol had been extracted?

The Witness: Yes.

Q. Don't these figures that the Master just read to you give us the candles just before it goes to the consumers?

Mr. Ransom: I object to any question based on that period of toluol extraction.

By the Master:

16127 Q. Well, it gives the candles before it went into the distributing mains?

A. It does.

Q. When it reached the consumer it might have been very much better because it was mixed with a high candle power gas?

A. Right.

Q. Now, in the 21st Street station, in April, 1917, I see the works test runs up as high as 26 as against about four for oil. That would be nearer the ratio, would it?

A. Yes; that would be nearer the ratio.

Q. And that was before the toluol work?

16128 A. That is right.

By Mr. O'Brien:

Q. What do you mean by saying it gets further candles when it is mixed with other gas in the main?

The Master: I know what he said—I said it.

Mr. O'Brien: That is not founded on any testimony in this case, your Honor.

The Master: Let us see about it.

Mr. O'Brien: You don't take the position the consumers ever got back what was taken out for Uncle Sam?

16129

The Master: No.

Mr. O'Brien: The company is insisting upon trying to get the money, but the poor consumers didn't get the candles.

The Master: The record is this: When they were extracting the light oil at 21st Street and 99th Street, there is nothing in the record that shows they were extracting the light oil from Ravenswood and other places. I, therefore, assume, as the record now stands, that the gas that went into the mains at other point may or may not have been more than 17 or 18 candle power. 16130
If they were, when this gas mixed with it, then this gas had a low candle power. However, that is entirely immaterial, and I am not going into the question of the candle power. It is not important, because I am not going to permit any question to be raised as to the candle power quality of the gas during the toluol work.

Mr. O'Brien: You will let us make our record?

The Master: You have made your record.

Mr. O'Brien: In this period we were getting a gas that was stripped—

Mr. Ransom: A better gas. 16131

The Master: It is perfectly clear on the record that they were getting probably less than 22 candle power gas. I have ruled, and will rule again, so that there cannot be any question, that I will not take any proof on that. If during that period they delivered less than 22 candle power gas to the consumers, during the time the government was extracting the light oil for war purposes, it will not be held by me, at any rate, to be a violation of the statute. Therefore, I will not take any further proof.

Mr. O'Brien: You are going to the question of the criminality. We had in mind for the moment the economic side, that the consumers paid for something they didn't get.

The Master: I am not going into that for the present. The only question here is whether this law is confiscatory. If it is, the consumers will have to worry about it themselves. I will not.

Mr. O'Brien: The reason I call your attention to it is this: We have our finger now on one appendix right here in the shape of the tests
16133 that they say they admit were 17—

The Master: I have admitted on the record as broadly as you can possibly get it by the hundred thousand questions—

Mr. O'Brien: Your Honor, it is one thing to strip gas and another to strip the public. Brother Ransom says it is for Uncle Sam, and therefore, the public must be stripped.

The Master: My ruling is this: This company, according to the proof thus far submitted, establishes the proposition that it made a 22 candle power gas. In other words, in its work it got a gas of a sufficient candle power to test 22 candle
16134 powers at a station a mile away.

Mr. O'Brien: They have only asserted that; they have not proved that.

Mr. Ransom: The 99th Street figures prove it.

Mr. O'Brien: Elliott's lamp has only just been mentioned. We have got to go into Elliott's lamp.

The Master: My ruling is this: That when the government came along and stripped that gas, taking out the light oil, there was no burden

or obligation on the part of the gas company to come back and make up the deficiency, if there was any, whether the gas was as good or not as good. They did all they were required to do.

Mr. Ransom: The government fixed the candle power to the consumers.

Adjourned to Tuesday, October 28, 1919, at 9:15 A. M.

Last Complainant's Exhibit 358.
Last Defendants' Exhibit MM. 16136

16137

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 16141

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, October 28, 1919.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 16142
MR. O'BRIEN, of Counsel for defendant Swann.

GEORGE E. WOODS, resumed the stand.

CROSS-EXAMINATION CONTINUED BY MR. O'BRIEN:

Q. Was there any extraction of light oils at Ravenswood conducted during the period of the war by the New Amsterdam Company?

Mr. Ransom: Objected to.

The Master: Sustained. 16143

Mr. O'Brien: Your Honor, the record shows that the gas made by the complainant has been to a large extent passed through the Ravenswood works and there enriched with oil gas.

The Master: I will sustain the objection.

Mr. O'Brien: And I submit that we should have the right and privilege of finding out how far it was stripped of—

The Master: I won't spend any time on that.

Mr. O'Brien: Is that on the ground that whatever the loss may have been in the gas of

candle power, it was due to the government, and you would not consider it even if it was disclosed that there was a considerable stripping of the gas which went directly to the consumers?

The Master: Correct.

Mr. O'Brien: Exception.

Q. Referring again, Mr. Woods, to Exhibit 351, have you any data to show the average number of men employed in the various classes of work involved in producing gas between the years 1906 and 1914, and 1914 and 1917?

16145 Mr. Ransom: Objected to. It has been fully covered. He asked him in great detail why he took 1906 and then took 1914 and then 1917, 18 and 19.

The Master: I am going to let Mr. O'Brien ask a few questions on that.

Mr. Ransom: If he desires to have that material prepared, it will be prepared.

The Witness: I have not.

The Master: With you?

The Witness: With me, no.

Q. Were you asked to average them or produce any data on that score?

16146 Mr. Ransom: Objected to.

The Master: Overruled.

A. I was not.

Q. Who selected the years for this exhibit for which you produce these figures.

Mr. Ransom: Objected to.

The Master: Overruled.

A. I think counsel suggested I pick out 1906 and some years prior to the war and the present years.

Q. Were any of your men paid in 1906 on an hourly basis?

A. No, I think they were paid on the daily basis at that time.

Mr. Ransom: That has already been covered, your Honor, by Mr. O'Brien, and it was covered by Mr. Chambers. There are specific questions that Mr. O'Brien has previously asked.

The Master: I will permit him to ask a few questions to see if there is anything new in what he is after.

Q. Don't you remember surely?

The Master: Objection sustained.

Q. What was the day's work at that time of the various classes of employees in the 99th Street and 21st Street stations? 16148

The Master: You mean the number of hours?

Mr. O'Brien: Yes.

A. It was twelve hours for the 24 hour work and ten hours for the single shift work.

Q. What classes of employees would you include in the 24 hour work?

A. The gas makers, fire cleaners, boiler firemen, engine room attendants, governor house men, the coal shed men, men on the tar tanks.

Q. Have you got a governor house at 99th Street?

A. 99th Street?

Q. Yes.

A. It is a governor house—it is a valve house in 16149 with the meter house.

Q. You call that a governor house?

A. We call it the meter house. We have the governor valve in there for regulating pressure.

Q. It is the same room where the three meters are?

A. That is right.

Q. That is where that one man is that I spoke of yesterday?

A Right.

Q. Where is the governor house located on the 21st Street station?

Mr. Ransom: Objection.

The Master: Objection sustained.

Q. Is there a governor house at the 21st Street station?

A. There is.

Q. How many men are employed in the governor house at the 21st Street station?

A. One man on a shift.

Q. Does the list of employees or the group of em-
16151 ployees set forth in Exhibit 355 include 14th Street or 42nd Street?

A. It does not.

The Master: You are talking about 351?

Mr. O'Brien: 351.

Q. Did you do the calculating to determine the rate per hour?

A. I did.

Q. What, in 1906, was the rate per day of the men used in gas production?

A. Let me see the schedule. I have it here.

Q. You are referring to a memorandum?

Mr. Ransom: Referring to Exhibit 353 for
16152 identification.

Q. Are you not able to give us that without referring to a memorandum, Mr. Woods?

A. No, I have to refresh my memory.

Q. Taking the first item now—go ahead and answer that question.

A. It will be 12 times 28-1/3 cents, whatever that figures.

Q. What?

A. 12 times 28-1/3.

The Master: 28-1/3 cents?

The Witness: Yes, sir.

Q. That is what?

A. That was the day foreman.

Q. What?

A. I haven't got a pencil.

The Master: $3.40 I figure it.

Mr. Ransom: That is for the day foreman?

The Witness: Yes.

The Master: That would be about right, $3.40 a day?

The Witness: Right, your Honor.

Q. What are you giving us now, Mr. Woods?

A. I am giving the rates paid, day's rate of pay 16154
for one foreman at 28-1/3 cents per hour.

Q. Oh, you have one foreman included under the head of gas production?

A. Yes.

Q. $3.40 a day?

A. $3.40 a day.

The Master: Twelve hour day at 28-1/3 cents an hour.

Q. Go ahead.

A. There is another foreman at the same rate.

Q. $3.40 a day?

A. Yes. Two shift engineers at $3 a day.

Q. Are you copying the figures now from an ex- 16155
hibit marked for identification?

A. Yes.

Q. Who prepared that?

A. It was prepared under my direction.

Q. Well, who prepared it: I mean the man? I don't want the answer impersonally. What man did it?

Mr. Ransom: I object to the question. The witness says he is refreshing his recollection. Mr. O'Brien asked him to make certain computations of how much per day at a twelve hour day and the wages at so much per hour.

The Master: I will let the witness state what the paper is he is using to refresh his recollection.

Mr. O'Brien: He said he was copying these figures now.

Mr. Ransom: He is not copying; he is computing.

The Master: He is copying the figures. Who were the men that prepared that tabulation for you, Mr. Woods?

The Witness: It was prepared by Mr. Carter, Junior, and Mr. Viebrock, and Mr. Rogers worked
16157 on this for me.

Q. Mr. Rogers?

A. Yes.

Q. Did Mr. Davidson have anything to do with it?

A. He did not.

Q. Did you see him working at it?

A. He didn't have anything to do with it.

Q. Was Mr. Goetz with you when Mr. Viebrock and Mr. Carter and Mr. Rogers got it up?

A. He was not.

The Master: That is all I will allow on that. Answer the question: what is the next item?

16158 The Witness: Two oilers at $1.75 a day.

Q. Well, come back to the shift there: there were three shift engineers, you said?

A. Two shift engineers.

Q. Two shift engineers at $3 a day?

A. Three dollars a day.

Q. And they worked twelve hours each?

A. They did.

Q. You set down for them how much per hour?

A. Twenty-five cents.

Q. Go right ahead.

A. Two oilers at $1.75 a day.

The Master: Now wait a minute. I am not going to permit that. Name the men who were on the 12 hour shift. The exhibit shows for itself how much per hour it was, and then you can name the 10 hour men and Mr. O'Brien can calculate it as well as you can. You have given us some of the 12 hour men. Now give us the rest of the 12 hour men.

Q. Before you do that—.

The Master: You have given us that, haven't you?

The Witness: I have not given all of them. 16160

The Master: Give me those you have not given us.

The Witness: Two boiler firemen at 20-5/6 cents per hour; one head gas maker at 22-11/12 cents per hour; three gas makers at 22-11/12; six fire cleaners at 18-3/4; two coal shed men at 17-1/2.

The Master: Now you are talking about cents per hour.

The Witness: Cents per hour, yes.

The Master: Multiplied by 12 will give you the day's pay?

The Witness: Right. Three tar men at 16161 22-1/2 cents. Three governor house men at 18-3/4 cents. I think that probably covers it.

The Master: In addition to what you have already given us?

The Witness: The 12 hour men, yes.

Q. Well, now, will you take the other classes and averages and just read them off, or at least give them to us?

A. One ash driver at 20 cents an hour.

The Master: A ten hour man?

The Witness: Yes; a ten hour man. One

16162 George E. Woods, Cross.

purifier house man at 17-1/2 cents; one coal shed elevator man 17-1/2 cents; one coal weigher 20 cents; one pipe fitter at 30 cents; one pipe fitter at 27-1/2 cents; one blacksmith at 25 cents; one carpenter at 17-1/2 cents; one rigger at 22-1/2 cents; one mason at 35 cents; two helpers at 15 cents; three watchmen at 14-7/12 cents. They, however, are 12 hour men, the watchmen. Two laborers at 17-1/2 cents and ten laborers at 15 cents.

The Master: These are 1906 prices?

16163 The Witness: 1906, yes, sir.

Q. Now, where do you get the figure for repair labor handling material, miscellaneous labor, indexers, governor house men and watchmen, from the same sources of information?

A. I did.

Q. Mr. Rogers got the matter up for you?

A. No, I got it up from the pay rolls.

Q. Well, did he fill the same function with regard to those that he did with regard to gas production?

A. Yes; it was all done at the same time.

Q. Where does he work up there usually?

A. In the engineering department.

16164 Q. Is he an engineer?

A. No, he is a clerk.

Q. Just a clerk?

A. Yes.

Q. How long has he been there?

A. Probably fifteen years.

Q. Did Mr. Carter, Junior, bring any instructions?

A. Did he bring me any instructions?

Q. Yes, as to the make up of this exhibit?

A. He did not.

Q. Where did you get instructions as to how to treat this whole subject in this exhibit?

A. My instructions?

Q. Yes. Where did you get them? You did not take them out of the clear sky, did you, or sit down at your home and get them up, or in your office? Some one told you what they wanted didn't they?

A. No one told me how to get it up.

Q. Some one told you what was wanted in the exhibit?

The Master: Somebody told you what they wanted the exhibit to cover?

A. Somebody told me they wanted the hourly rates of pay. 16166

Q. Who told you that?

A. Counsel.

Q. Mr. Ransom?

A. Judge Ransom.

Q. Did he go over a tentative exhibit with you?

A. He did not.

Q. Did he tell you to get weighted averages where you made averages?

A. No, he did not.

Q. Why didn't you put the weighted averages in here?

Mr. Ransom: I object to that.

The Master: Objection overruled. 16167

A. The weighted averages are in there.

Q. Will you take this figure here, take 1906, take the hourly wage for each one of the classes of men that you have enumerated, and show me that you have an average of 19.63 cents?

Mr. Ransom: I object to that.

Mr. O'Brien: That is a good way for him to demonstrate it.

Mr. Ransom: It would take half an hour or more to do that.

The Master: I am willing to take the time to

prove up one item, to show whether the rest of it is right or not.

The Witness: You would have to take the pay roll to do it, you couldn't take that number of men.

Mr. Ransom: This was made from the pay roll?

The Witness: It was made from the pay roll.

Mr. O'Brien: I move to strike out the volunteer remark of counsel and the witness. I am examining the witness, and I would like to get a crack at him.

16169 The Master: Judge Ransom, just give Mr. O'Brien opportunity to cross-examine the witness as to the accuracy of this statement.

The Witness: Your Honor, I couldn't do that in an hour, or two.

The Master: Have you got the data here to do it on?

The Witness: No.

The Master: If you have the data here to do it on I will direct you to do it if it takes all morning.

Mr. O'Brien: Your Honor, he proceeded a minute ago to give us the number of men, the

16170 classes of their work included in gas production—

The Master: That speech is unnecessary. I am with you so far as the witness is able to do it. He says he cannot do it here.

Q. Why can't you do it? Have you the number of men on which that average was predicated?

A. If I should combine 21st and 99th Street together I could do it in a couple of hours. I could not do it in less time than that. I would have to make every one of these calculations on every man. I could bring that calculation in.

Q. Haven't you got the number of men?
A. Yes.
Q. Haven't you got the foremen?
A. Yes.
Q. Haven't you got the number of engineers?
A. Yes.
Q. Haven't you got the number of helpers?
A. Yes.
Q. Haven't you got the number of gas makers?
A. Yes.
Q. And the number of gas maker helpers?
A. Yes. 16172
Q. And the others that make up the group under the title, "cost production"?
A. Yes.
Q. Haven't you got there the maximum rate individually per hour?
A. Yes.
Q. And haven't you got the minimum rate individually per hour?
A. Yes.
Q. And haven't you got the average rate for each individual here?
A. Yes, and I could make it up—
Q. Why couldn't you get then, the average— 16173

The Master: He started to say something.

The Witness: I would have to go through the total list and make the calculation for everything to get the weighted average.

The Master: What is the purpose of the weighted average?

Mr. Ransom: He has given the weighted average.

Mr. O'Brien: The average is no good unless you get the weighted average.

16174 George E. Woods, Cross.

The Master: What do you mean by the weighted average?

Mr. Ransom: He has given the weighted average.

The Master: What do you mean by the weighted average?

Mr. O'Brien: You divide the total of pay per hour by the total of men per hour.

Mr. Ransom: He has given that.

Mr. O'Brien: I wanted to verify that figure to show that he has been over it, that is all. I
16175 have taken this one line and asked him to go through with it. Talk about taking an hour, the engineer of manufacture of this big concern that they depend upon.

The Master: Mr. O'Brien has asked you to show him the calculations which will bring out the results here on this first item.

The Witness: Right.

The Master: He has likewise asked you whether you didn't have certain data here, which you said you had. With the data you have here can you make the calculations that would bring out that result?

16176 The Witness: I can in about two hours' time. It would take me at least that, because I have to take one hundred and sixty odd men. To get the weighted average you have got to compute the time of every man.

Mr. Ransom: At two plants.

The Master: The data is in court then?

The Witness: Yes, from the data that I have here I think I can make the computation.

Mr. O'Brien: Your Honor, the paper is valueless.

Mr. Ransom: The paper is of the utmost value.

Mr. O'Brien: He says that Rogers handed him that, and he brought it in here.

Mr. Ransom: The witness did not say Mr. Rogers made it up at all.

Mr. O'Brien: Mr. Carter, Jr., and three or four other men, he has taken their word for it.

Mr. Ransom: He said he made it up himself.

Mr. O'Brien: This case is too important to build it up on presumptions that men are lightning calculators and that they are honest and conscientious.

Mr. Ransom: The statement of Mr. O'Brien 16178
is a deliberate misstatement of the witness's testimony. The witness's statement was that he made it up personally, Exhibit 351, from the pay roll and the time book. With respect to this other exhibit for identification, he said he made it up with the aid of three of his subordinates, Mr. Carter, the assistant engineer of manufacture, Mr. Rogers, and Mr. Viebrock. So far as this is concerned he made it up himself, computed everything, looked up everything. The weighted average is there.

The Master: That is not the point. Mr. O'Brien is trying to test the accuracy of this paper. 16179
I hate to waste a whole morning on it when the result may be to prove up the thing. The witness swears he did it and has checked it.

Mr. O'Brien: Your Honor, I have brought out the fact that they come in here with a paper that they ask you to accept for identification where the vital calculation is not on it. This goes to their good faith in coming in here with a lot of data—

Mr. Ransom: What is not on it?

Mr. O'Brien: The computation is necessary to show that that result is correct.

16180 George E. Woods, Cross.

Mr. Ransom: This tabulation is of the two plants of the Consolidated, 99th Street and 21st Street. This exhibit for identification does not combine the stations.

Mr. O'Brien: If your Honor please—

Mr. Ransom: Just a moment, there must be a limit to the Vesuvius which tries to overrun this case. The witness can take the 99th Street figures and the 21st Street figures and put them together, but it will take a long time.

Mr. O'Brien: Your Honor, I can take this
16181 witness in tow and in about fifteen or twenty minutes we will find whether he knows anything about this or not. If you will bear with me and let me ask him where he got these averages for the different classes of men. If he knows his business, and if he is worth $13,500 to this combination, then we will find it out. I am not starting with the assumption that anybody is worth the salary they are paid, or that this company is being economically run.

The Master: The question I am considering now is whether we want to take up two hours in testing this.

16182 Mr. O'Brien: I submit that the minimum of the test of the accuracy of this paper ought to be allowed.

The Master: I agree with you. Do you think you can bring out what you want by some questions?

Mr. O'Brien: Why, he can enumerate each of the classes of labor—

The Master: He did that.

Mr. Ransom: At the one plant he did.

By the Master:

Q. Which is the smaller plant, 99th Street?

A. Yes, your Honor.

Q. How long would it take to take 99th Street?

A. How long would it take to take 99th Street?

Q. Yes, take the number of men for 99th Street and get a weighted average for 99th Street?

A. It would not give that weighted average.

Q. No, it would not give this, but it would be something like this, wouldn't it?

A. It would be something like that.

Q. Instead of being 19.63, it might be 21.72, or something else, a little more or less?

A. Yes. 16184

Q. It would come pretty close to this, wouldn't it?

A. Yes.

Q. How long would that take?

A. Half or three quarters of an hour.

Mr. O'Brien: Your Honor, I can do something while he is doing that. I have a stenographer here to take some dictation. I can use the time if you want to take a recess.

Mr. Ransom: I submit that with the data that is before counsel for defendants it is perfectly susceptible of calculation. They have had this exhibit for two weeks.

The Master: Yes, but on cross-examination 16185 they want to show what this man knows about it. You think you can do it for 99th Street in half an hour?

The Witness: I would undertake it.

The Master: Well, do it.

Mr. Ransom: This is done over my objection and exception?

The Master: I do that, Judge Ransom, for my own satisfaction. One of the things I want to be perfectly clear about is just what the labor

cost is in the making of gas, and what it was in 1906, as compared with what it is today, and I think for my own satisfaction, and for the clarity of the record, it is worth spending half an hour to get this right. Now, if his figures show anywhere near 19.63 I shall assume that the labor in that year was about 20 cents. I will not assume it, it will be demonstrated and proved.

(A recess was then taken.)

16187 By Mr. O'Brien:

Q. Mr. Woods, you have been calculating for the last twenty minutes?

A. Right.

Q. And you have figured out for the 99th Street plant for the year 1916, a weighted average?

The Master: 1906.

Q. 1906, a weighted average?

Mr. Ransom: The first week of January, 1906.

Q. (Continuing.) Of the hourly rate of wage for the group of employees which you have included under the term "gas producton"?

A. I have.

16188 Q. And these employees consist of—

The Master: Let him state what he did.

Q. Yes; of what men and what number?

The Master: Let him state the men he used, the time he used and what he did to arrive at a weighted average; what his result is.

The Witness: I took the foremen—

Q. How many?

A. Two foremen.

Q. Of what—you might read the—

The Master: Let him state.

Mr. Ransom: That has all been given.

Q. Give us the wage, the day and the hour.

A. Two foremen at 28 1/3 cents, which made 56.66 cents; two shift engineers at 25 cents, which made 50 cents; two boiler firemen at 20 5/6, which made 40.83 cents.

Q. Forty and what?

A. 40.83.

Q. Yes.

A. Four gas makers at 22 11/12, which made 91.66. Six firecleaners at 18 3/4, which made $1.12 1/2 I took two coal shed men at 17 1/2 cents, which made 35 cents. 16190

Q. Two what?

The Master: Coal shed men at 17 1/2 cents, which made 35 cents.

A. (Continuing.) Two tar men at 22 1/2 cents, which made 45 cents. One coal shed elevator man at 17 1/2 cents, which made 17 1/2 cents; one purifier house man at 17 1/2 cents; one coal weigher at 20 cents; seven laborers at 15 cents, which made $1.05; making a total of 30 men, which made a total of $5.9165 per hour, an average per hour of 19.72 cents per hour.

Mr. Ransom: The figure on Exhibit 351 being what? 16191

The Master: .196 something.

Q. And what did you get for the total wage per hour?

A. $5.9165. Let us see whether that is correct or not (witness calculates). $5.9165.

Q. So that you have allotted to the 99th Street plant, this branch of the work, thirty men?

A. For that part of it, yes.

Q. Well, now, will you take the men for the 21st Street plant and make the same figures?

Mr. Ransom: Objected to.

16192 George E. Woods, Cross.

The Master: Objection sustained. I will not allow it.

Q. Have you included in this list here only the men that you have previously testified were embraced under the grouping "Gas Production"?

A. Right.

Q. Is this grouping of this class of men under "Gas Production," a common practice in the records of the company, and in the supervision of their work?

Mr. Ransom: Objected to.

The Master: Is that not in accordance with
16193 the Public Service regulations?

Mr. Ransom: It is a definite classification which has been recognized, I think.

The Master: Objection sustained.

Q. What classes of men are in this enumeration which are not included in your manufacturing book?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Will you take, Mr. Woods, January, 1918, the 99th Street plant, and go through the same process?

Mr. Ransom: Objected to.

The Master: Objection sustained.

16194 Mr. O'Brien: Your Honor, I want to take one period out of the manufacturing books that we have in court.

The Master: No, I will not allow it.

Mr. O'Brien: So that we will know how they compare with the figures that he makes out, how the exhibits do, and also how they compare with the manufacturing book.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, then, is drawing the conclusion that because the witness approximated the figure on this Exhibit 351, that is a sufficient test?

The Master: Yes.

Mr. O'Brien: On the accuracy of the whole paper?

The Master: Yes.

Mr. O'Brien: Well, I note an exception, your Honor.

The Master: I have got to draw a line, because if I did not draw a line this thing would be interminable, I am satisfied—

Mr. O'Brien: No, but you have it here, the witness said it would take him two hours to do this calculating and he had it done in ten min- 16196
utes.

The Master: He took thirty men; not 142. My ruling is that in the light of the testimony of this witness that he supervised and directed the preparation of this exhibit, that he went over the figures with the three men who worked on it, and he knows they are correct, and in the light of his actual calculation in court of the 99th Street plant for the first week of January, 1906, which carries out and substantially bears out the figures shown on this exhibit, I am satisfied that the exhibit can safely be taken as an exact statement of facts. 16197

Mr. O'Brien: I take an exception to your Honor's ruling, and I will ask the witness now—

Q. Have you preserved the data from which Exhibit 351 was made up by Mr. Carter, Mr. Viebrock—

Mr. Ransom: I object to the question.

The Master: Wait until the question is finished.

Q. (Continuing.)—and Mr. Rogers?

Mr. Ransom: I object to the question. The witness has not said they had anything to do with making up the Exhibit 351.

16198 George E. Woods, Cross.

The Master: Oh, well, do not fuss about the particular language.

Mr. O'Brien: We all agree about it.

The Master: The point of the question, I think, is, is that data preserved that was used in making up this Exhibit 351?

The Witness: The original calculations, I am not sure that they are, your Honor.

Q. Have you got anywhere preserved, in a paper or in a book or in a record, each of the lists of men for each of the groups, and the years named on Exhibit
16199 351, from which some outside accountant—

The Master: The objection is sustained upon the ground—

Mr. O'Brien: Let me finish, your Honor.

Q. (Continuing.)—may determine the correctness of these figures?

The Master: The objection is sustained upon the ground that the witness has testified that those figures are based upon the actual pay rolls, and your accountant can do it just as well as he can.

Mr. O'Brien: Your Honor, supposing our men go up there, and I want to dispose of this
16200 entirely this afternoon, and I say to the men, "Go in there and get that and verify it." I want to find out whether we can have the pay rolls from which he operated—not his private figures—I do not want anything that is private. I want the basis of this calculation and I am asking this—

The Master: He has already testified that.

Mr. Ransom: You can have the pay roll any time you can persuade Mr. Bemis to go up there.

The Master: He has testified, Mr. O'Brien—and if I am not correctly stating the substance of

his testimony the witness will correct me—that that tabulation is based upon the original pay roll books, to which he had reference.

The Witness: That is right, your Honor.

The Master: And anybody else can go to those original pay roll books and make the same calculation.

The Witness: Right.

By Mr. O'Brien:

Q. Have you got the same grouping there, "Gas Production," and the men enumerated under it; repair labor, and the men enumerated under it, "handling material," and all the men embraced under that, that you have included here in your testimony, "Miscellaneous Labor, Indexers, Governor House Men, Watchmen," in the groups there in the pay roll? 16202

A. They are not grouped just like that.

Mr. O'Brien: No, there is the trouble, your Honor. It is a wild goose chase to keep our men busy so they will have no time to get the results they ought to have.

By the Master:

Q. How can the experts for the defendants segregate these same items? Is there not some way they can segregate them? 16203

A. It shows the classification of the work.

Q. How did you get that?

A. The men I classified in different classifications, as to the work that they are doing, your Honor. I took those pay rolls as I testified, and went down and segregated them, personally, into these different accounts, and then got the recapitulation.

Mr. O'Brien: There is the difficulty, your Honor.

The Witness: I took the pay rolls and went down and found those men—

Mr. O'Brien: It is simply going down Pearl Street, that is all; our men would have to spend hours trying to figure out where they are. They will have to take the record; the record will not be complete, because your Honor would not indulge me to the extent of getting every one of those men in every one of those groups on record, and our men cannot verify them.

Mr. Ransom: If your men do not know what "Gas Production" and "Repair Labor" and "Handling Material"—

16205 Mr. O'Brien: That is not an aggregation of groups of men under the rules of the Public Service Commission; that is an arbitrary grouping of men that they have taken, to come here and work out their own purpose of high, low and the game.

The Witness: It is a recapitulation of—

Mr. Ransom: It shows the records and the hourly average rate of pay.

The Master: You have to wait until these lawyers get through talking, Mr. Woods.

The Witness: I made that up, your Honor, as I testified, going through and getting the classi-

16206 fications and segregating them as to the men that I thought were working on that, and then made a recapitulation as to all the men on the pay roll, giving the rates as of the entire plant at the bottom; because my view of it was at that time that it did not make any difference whether it was in gas production or handling material or repairs. The thing was to get the rate of pay being paid at that plant, and the recapitulation covers every man on the pay roll and gives the rate of pay.

The Master: One minute. Mr. O'Brien's point is this, that if his engineers or accountants

go up there and try to check up your figures for men handling material, not necessarily the number of men, but the weighted average that you have given, his men would not be able to pick out the same items of labor that you have picked out for handling material.

The Witness: They might not be able to pick out the exact amount, because I just went through the pay rolls and picked them out in order to get that recapitulation of the whole, which will be indicated on the pay rolls, and the exact number of men employed as of that time. 16208

By the Master:

Q. Mr. O'Brien's accountants can get that recapitulation item from the pay rolls?

A. They can.

Q. By taking the men employed?

A. By taking the men employed and getting that recapitulation, which shows the average rate of pay for all the men employed.

Q. That will appear from the pay rolls?

A. From the pay rolls.

Q. In other words, if you take the pay roll of all the men employed—

A. Take the pay rolls, you would get that number 16209 of men.

Q. During that period?

A. To get that average.

By Mr. O'Brien:

Q. Mr. Woods, let me ask you further, did you use the time books of the works?

A. I did.

Q. You had to get them, did you not, to get all the data that you needed to make this up?

A. Yes, I did.

16210 George E. Woods, Cross.

Q. And are the time books in your office, and are they kept together where they are available?

A. No, they are back at the plants.

Q. They are at the different plants?

A. They are.

Q. Distributed between 99th Street and 21st Street?

A. Right.

Q. Are the men living who made up those time books back for 1906, or the earlier period?

Mr. Ransom: Objected to.

The Master: Objection sustained. We have
16211 been all over that. That is pretty fully on the record.

Q. What part of the time books did you use in making up Exhibit 351?

A. The time book that covers that period; the different time books covering different periods.

Q. What data did you get from the different time books? Why did you go to the time books?

A. Because it was the original source of information.

Q. As to what particular information?

A. As to the number of men employed and pay, their rates of pay.

16212 Q. Did not the pay roll book give you all that information?

A. I took the time books, being the original source of information, in some cases, and I took the pay rolls in the others.

Q. In what cases did you take the time books, and in what cases did you take the pay roll books?

A. I do not recall now. I think in 1906, it may have been—I should say it was the time books as of 1906.

By the Master:

Q. Was there some point in your mind about taking time books for one period?

A. No, there was not a particle of difference, your Honor.

Q. Why did you do it?

A. I think the pay rolls in some cases were the original source of entry; that is, so that they copied right from the pay roll, where the men—I am not just sure how many pay rolls I took; most of them were time books.

Q. Did you have to look up the time books to see 16214
what labor they had been used for, what work they had been used for?

A. The classification would indicate generally, your Honor.

Mr. O'Brien: I call your Honor's attention to the statement here just made, that most of them were time books, although we are going to use what pay rolls now are available. The time books have not been turned over to any investigators yet, your Honor.

The Master: Well, get them. They are subject to court order.

Q. Will you state positively that in making up this 16215
Exhibit 351 you have the time books of the 99th Street station for that period and the time books for the 21st Street station?

A. The 21st and 99th Street stations for 1906, we took the pay roll books.

Q. You are reading from a paper just handed to you in the midst of my question by Judge Ransom?

A. Right.

Mr. O'Brien: Your Honor, I am going to ask you to instruct counsel when I am asking the witness a question not to hand him the an-

swer written on a piece of paper. The practice ought to be condemned. He may say he is refreshing his memory, but we want to have the record made, and I do not want Mr. Ransom's answer.

The Master: I think Mr. O'Brien's criticism is correct. You could straighten that out on re-direct.

Mr. Ransom: Yes. But this is a memorandum gotten up by the witness.

Mr. O'Brien: Yes.

16217 The Master: I would not do that.

Mr. O'Brien: It is not the first time you have done it. You have done that a hundred times before.

Mr. Ransom: You are awfully afraid of the facts.

The Master: Not a hundred, but several times.

Mr. O'Brien: I am trying to get the facts, and I am pulling teeth to get them.

The Master: That is all I want—

Mr. Ransom (interrupting): Your own teeth are all, and they are false.

Q. Now, Mr. Woods, did you have time books
16218 of both the stations for that period?

A. Right.

Q. Did you have the time books for the year 1914, for January?

A. May I refresh my memory.

The Master: Yes, if you have anything to refresh your recollection.

A. (Continued.) For January, 1914, we used the pay roll book.

Q. Please set that paper aside, Mr. Woods. I want to find your memory on this.

The Master: No, he says he wants that to refresh his recollection.

Mr. O'Brien: I would like to get to some part of his testimony where he is not going to have something that has been prepared for him to read into this record.

Mr. Ransom: This is something he prepared for himself.

The Master: There is nothing in the case to show that that was prepared for him.

Q. Who got that paper up you are reading from now, Mr. Woods?

A. I did.

Q. Will you hand it to me? 16220

The Master: Certainly, hand it to Mr. O'Brien?

Mr. Ransom: Surely.

A. Yes (handing papers).

Mr. Ransom: May it be marked for identification?

Q. Did counsel for complainant tell you to bring this into court?

A. He did not.

Q. When did you last see it?

A. Just now.

The Master: Mr. O'Brien means just prior to this time when did you last see it. 16221

The Witness: I don't know. A day or two ago.

Q. Before you received this from counsel, you were not able to tell us for what periods shown in Exhibit 351 you took your pay roll book, and for what periods you took your time books to make up Exhibit 351?

A. No, we have used the pay roll books and the time books, and just at the time I did not know.

The Master: The question is, before looking at this paper you were not able to give from your

recollection for which period you used time books and which you used pay rolls?

The Witness: That is right, your Honor.

Q. Now, without looking at the paper, could you say whether you used the time books or the pay roll books for the period January, 1917?

A. No. Without the paper—

The Master (interrupting): That is an answer, no. And that answer applies to all the other periods?

The Witness: Yes.

16223 Q. What does this inscription mean, number of men estimated upon percentage of whole represented by Consolidated operation?

Mr. Ransom: I object.

The Master: I will allow it.

Mr. Ransom: He is referring to something about which this witness has not been interrogated at all.

The Master: I will allow it.

Mr. Ransom: All right, exception. Then show it to the witness.

A. That refers to the street department where they are doing work for other companies, your Honor.

16224 The Master: That is an answer. Next question, Mr. O'Brien.

Q. Do any of the employees grouped and summarized in Exhibit 351, do work, or did they do work during the periods covered thereon on repairs of mains?

A. To what do you refer now?

Q. I am referring to any of the men that are incorporated in or embraced within these aggregate figures under gas production labor, labor handling material.

The Master: Don't read those items. Those items on Exhibit 351.

Q. And the rest?

A. They did not.

Q. This repair labor—to be specific, does repair labor include any labor done on repairs to mains?

A. It does not.

Q. You are sure of that?

A. I am.

Q. Does it include any repair work done outside the shops where gas is made?

A. It does not. 16226

Q. Can you state what number of men for January, 1918, in the 99th Street or 21st Street plants were engaged on repairing work at the works?

A. The number that is indicated there.

Q. Can you state the number in each plant?

A. I do not recall the number.

Q. Have you any data here, or has counsel got any paper which might refresh your memory on that?

A. I could give you those men that were working on repairs.

The Master: The total, or can you segregate it as to each plant?

The Witness: I am not sure that there is a 16227 segregation.

The Master: Well, let me see that a minute. Have you got it segregated, Mr. Woods?

The Witness: No, I would have to figure it out, your Honor, to find out.

The Master: Next question.

Q. Did counsel discuss with you the getting up of an exhibit that would show the comparison of the hourly rates of wages of various classes of men segregated into various classes of work, engaged in the

making of gas, in accordance with the groupings in the Public Service Commission reports?

A. He did not.

Q. He did not suggest to you that you set apart the group for repairs to boiler houses, repairs to generator houses?

A. We did not. Counsel—

The Master (interrupting): That is enough.

Mr. O'Brien: I am going to ask, so that the record will be complete, your Honor, to have him read into the record the list of men and the classes
16229 of each one of these groupings, otherwise our work has gone for naught for checking purposes.

Mr. Ransom: Well, Exhibit 353 for identification, gives all of that testimony in summary form.

The Master: But Mr. O'Brien has not asked you to offer in evidence Exhibit 353. He asked it in another form.

Q. Mr. Woods, I will ask you now, you perhaps can do it hurriedly and not take up too much time.

The Master: Don't forget you have a stenographer, to take it, when you say hurry.

Q. (Continuing.) The number of men and the classes of their employment, and if you have it handily
16230 at the same time, the daily wage of each man included under the title, "Gas production."

The Master: He has given gas production.

Q. Did you give us all of gas production?

A. Yes.

Q. For one plant or two?

A. For the 99th Street plant I gave.

Q. You did not give it for the 21st Street plant?

A. I gave the classifications.

Q. For the 21st Street?

A. Yes.

Q. Did you give us the number of men employed there?

A. No.

Q. Will you proceed to give that and then give us all the information I have asked for in regard to each of these other groups?

The Master: Let us see if we cannot shorten that. Have you made up a statement showing that information, Mr. Woods?

The Witness: I did.

The Master: That is 353 for identification.

The Witness: 358.

The Master: A copy of that has been furnished the other side, has it, Judge Ransom? 16232

Mr. Ransom: Two weeks ago.

The Master: Objection sustained.

Q. Let me have that, Mr. Woods?

A. Yes (handing paper.)

The Master: You have a copy of that, haven't you?

Mr. O'Brien: I haven't it here, your Honor. Now, your Honor, I want to submit here, and I don't want to get vehement about it, and introduce any acrimony, but I hand that to you as a fair sample of the treatment of counsel for the complainant. If he thinks he is going to lead me on a wild goose chase, he had better stay up all night to do it. 16233

The Master: I don't get your point.

Mr. O'Brien: My point is that there is no separation of the groupings for those men. What I want is to get on the record, or get something somewhere showing the number of men under each one of those four different groups in Exhibit 351, and he tries to bluff the Court that that contains that grouping, and it is not in it at all.

Mr. Ransom: The witness is not trying to bluff the Court.

Mr. O'Brien: I am not talking about the witness, I am talking about counsel. If the witness is left alone, we would make some progress and get some proof.

The Master: Well, this Exhibit 351 for identification, Mr. Woods, does not put the various classifications into the groups?

The Witness: No, that is not segregated, your Honor.

The Master: Have you got the groupings of those various classifications.

16235 The Witness: No, I haven't got that.

The Master: What Mr. O'Brien wants to know is, you have a classification "General Foreman." Where did you put the general foreman, 39 2/7, in which group?

The Witness: Gas making labor.

The Master: What?

The Witness Gas making labor.

The Master: Where did you put the general foreman at 33 1/3 cents?

The Witness: Gas making labor, generator house foreman, that probably reads, your Honor.

The Master: The chief engineer, where did

16236 you put him?

The Witness: Gas making labor.

Q. Well, you haven't any title of a grouping in Exhibit 351, called gas making labor. Do you mean by that, gas production?

A. Gas production, yes.

By the Master:

Q. Well, how about engineers, three engineers?

A. Gas production.

Q. Gas production?

A. Yes, sir.

Q. Six oilers?

A. That is gas production.

Q. Three head boiler firemen?

A. Gas production.

Q. Four boiler firemen?

A. Gas production.

Q. One boiler maker, is it?

A. Boiler makers would be under repairs.

Q. Is there more than one group of repairs there?

A. There are different kinds of repairs.

Q. Well, which repair group did you put it in, repair labor?

A. That came under repair labor.

Q. Repair labor?

16238

A. Yes, sir.

Q. How about the boiler helpers?

A. Boiler makers helpers would come under repair labor.

Q. Coal passers?

A. That would come under gas production.

Q. Generator runners?

A. Gas production.

Q. Generator foremen?

A. Gas production.

Q. Generator coal wheelers?

A. Gas production.

Q. Generator firemen?

16239

A. Gas production.

Q. Bench men?

A. Gas production.

Q. Head coal shed men?

A. Gas production.

Q. Coal shed man?

A. Gas production.

Q. Pump house?

A. Gas production.

Q. Indexers?

A. That would come under governor house indexers and so forth.

Q. Miscellaneous labor, indexers, governor house?
A. Yes.
Q. Drip men?
A. Would come under miscellaneous labor.
Q. Governor house men?
A. Under miscellaneous indexers, governor house men.
Q. Purifier house men?
A. Under gas production.
Q. Generator house mechanics?
A. That would come under repairs.
16241 Q. Repair labor?
A. Repair labor.
Q. Pipe fitters?
A. Labor, repair labor.
Q. Pipe fitter foremen?
A. Repair labor.
Q. Iron workers?
A. Repair labor.
Q. Roofers?
A. Repair labor.
Q. Foremen of blacksmiths?
A. Repair labor.
Q. Machinists?
16242 A. Repair labor.
Q. Riggers?
A. Repair labor.
Q. Carpenters?
A. Repair labor.
Q. Painters?
A. Repair labor.
Q. Masons?
A. Repair labor.
Q. Pipe coverers?
A. Repair labor.
Q. Helpers?
A. Repair labor.

Q. Hoisting engineers?
A. Under handling materials.
Q. Hopper men?
A. Handling materials.
Q. Conveyor men?
A. Handling materials.
Q. Storeroom clerks?
A. That would come under miscellaneous.
Q. Timekeeper?
A. Would come under miscellaneous.
Q. Drivers of coal cart?
A. Handling material.
16244
Q. Ash carts?
A. Handling materials, refuse material.
Q. Labor foremen?
A. He would come under—it might be a segregation. It might be under repair labor, handling material, or handling coal.
Q. System labor foreman—
By Mr. O'Brien:
Q. Well, how did you handle it here?
A. I do not recall. I would have to look up the account, just how it was, when he was working.
Q. How would a statistician representing the defendant Edward Swann find out where you put it if he wanted to verify your figures here of .1963 for 1906, and your figure of .3590 for 1918?
16245
A. He would probably find the work he was doing as of that time.

The Master: Skilled laborers, where did you put them?

The Witness: Probably under gas manufacturing, and probably under—

Q. What is that? He would find what?
A. Some under gas manufacture and some under—

The Master: Wait a minute. He is answering me.

The Witness: Gas production and handling material, your Honor.

Q. Going back to my question, Mr. Woods, how would he find it out if you are in doubt now as to where it is put? You have not preserved the paper that will guide him?

The Master: Now, you have asked a question. Don't argue it. How would the statistician find out what this labor foreman was doing?

The Witness: Probably indicated in the time record as to what he was doing.

16247 By the Master:

Q. Now, the watchmen, where do they go?

A. They would go under the general miscellaneous.

Q. Purifier house men?

A. They would be in gas production.

The Master: Well, now, I have gone through this entire list, Mr. O'Brien, for the 21st Street house. I do not see how you can get any more information than that. He has told you what he recalls of it as to groups.

Mr. O'Brien: Your Honor, doesn't it appear, and you need not answer me, this is a rhetorical question, but doesn't it appear strange that they would not keep or preserve something that would give somebody a chance to check up their work?

16248

The Master: The trouble with it is this: I am going to answer your question.

Mr. O'Brien: Why destroy the trail?

The Master: Apparently there was in Mr. Woods' mind more than anything else the question of what their total labor average expense was.

Mr. Ransom: And the increase?

The Master: And the increases. Why he segregated it into groups, I don't know, except—

Mr. O'Brien: As I look upon it, I think your Honor ought to discredit all these exhibits, every Woods' exhibit as absolutely worthless, and that is why I brought out these things, so that your Honor will see that you haven't got anything before you here on which you can allow that paper to be in evidence.

The Master: All right.

Mr. O'Brien: I ask that this paper that the witness was handed by counsel in the midst of my question a few minutes ago—

The Master: And that you have been using for 16250
cross-examination.

Mr. O'Brien: And that I have used, be marked for identification.

The Master: Yes, I will do that; and I will mark it as an exhibit if complainants want.

Mr. Ransom: I desire it.

The Master: To be marked as an exhibit?

Mr. Ransom: Yes, sir.

The Master: It will be marked.

Paper marked Complainant's Exhibit 359.

Mr. O'Brien: I take an exception to the admission of Exhibit 359, as incompetent, irrelevant and immaterial, not having been prepared by the 16251
witness, not having been verified, and the underlying papers from which it has been taken not having been produced in court, and on the further ground that it is valueless even if admissible, because it has a title, "Sources of information," but does not state that it was the only source.

The Master: I overrule Mr. O'Brien's motion.

Mr. O'Brien: Exception.

Mr. Ransom: The witness says that he prepared it personally.

Q. Mr. Woods, when did you prepare this paper now Exhibit 359?

A. Three or four weeks ago.

16252 George E. Woods, Cross.

Q. Did Mr. Ransom suggest to you that it might be well to have it in court?

A. He did not.

Q. Why did you prepare it?

A. As a memorandum of where the sources of information came from.

Q. Why, not how, why?

A. As a reminder, as a memorandum so that I could refer to it.

Q. You didn't want to trust your memory as to the sources of information contained on Exhibit 351?

16253 A. I thought it would be better if I had a record as to just where the information came from.

Q. Did you think your memory would fail you in regard to the sources of information?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Ransom: He had a perfect right to get up a memorandum and give it to me.

Q. You have here not only the sources of information for determining rates of week day wage of 21st Street and 99th Street, but you have shown here other items, 44th Street, 42nd Street, 63rd Street and 65th Street, 111th Street, 132nd Street, Kingsbridge, street

16254 department, shop department?

A. Right.

Q. Have you prepared exhibits that include information similar to that set forth on Exhibit 351, as to 44th Street, also 42nd Street, 63rd Street, 65th Street, 111th Street, 132nd Street, Kingsbridge, street department and shop department?

A. Have I prepared what?

Q. Exhibits similar to 351?

A. There is such an exhibit there.

Q. Where is it? Where is the exhibit like this Exhibit 351 that covers labor for these other places?

A. On the following exhibits.

Q. I am talking about 351 now. What is the use of trying to josh me? I am talking about the groupings on Exhibit 351, not your list of employees.

Mr. Ransom: Look at the second sheet of 351.

The Master: Let me see the second sheet of 351.

Mr. O'Brien: Why, your Honor, they have got it all put together, not segregated under boiler house, and production labor.

Mr. Ransom: Exhibit 352 gives the 44th Street station.

Mr. O'Brien: It gives money. You are trying 16256
to abuse the indulgence of the Court. No labor is mentioned, no classes of labor, it simply gives money.

Mr. Ransom: 358 does.

Mr. O'Brien: It does not give the information grouped on Exhibit 351.

I move at this time that the exhibits that have been put in evidence since Mr. Woods went on the stand be excluded from the record.

The Master: Motion denied.

Mr. O'Brien: Exception.

The Master: The question as I understand it is, on your sources of information you have refer- 16257
ence to other plants and holder stations?

The Witness: Right.

The Master: Did you in precisely the same way that you made up the first sheet of Exhibit 351 for the 99th and 21st Street stations, make precisely the same kind of tabulation as to the other stations?

The Witness: The same kind of information, not the same groupings, because it is a holder station, and the whole labor cost was charged to that holder station.

The Master: It is not precisely in the form of Exhibit 351?

The Witness: No.

Q. This Exhibit 351 contained all of the employees of 99th Street and 21st Street at the times that are there mentioned?

A. All of the employees that were on the pay roll, yes.

Q. It is a fact, is it not that the days were longer for all the various classes of employees referred to and embraced in Exhibit 351, in 1906, than they are at the present time, or September, 1919?

Mr. Ransom: Objected to.

16259 The Master: Objection sustained.

Mr. O'Brien: Your Honor, they have certain percentages here, and I want to show you why they reduced this to an hourly basis.

The Master: What difference does it make?

Mr. O'Brien: It makes all the difference in the world. Those percentages do not tell the truth. They are different hours of labor in 1919 than they were in 1906.

The Master: But it is reduced to an hourly basis.

Mr. O'Brien: Why, it is misleading—

Mr. Ransom: Not at all.

16260 Mr. O'Brien: It is misleading. They have got in here, put down four gas makers at $4 a day and eight gas makers at so much a day—

The Master: I can't understand how it is misleading.

Mr. O'Brien: When you get down to the real helpful figure that is going to be helpful to you, it will be so much labor to make a thousand cubic feet of gas.

The Master: Yes.

Mr. O'Brien: Boiler house labor, generator house labor are two of the common subdivisons, they have other groupings covering miscellaneous work. Now, when we get that, you may reduce

to cents per thousand cubic feet made, or cents per thousand cubic feet sold, and you may get a table of comparisons that may be of some help to you, but not when you take the period here and reduce it to shorter days; in other words, a man that is working eight hours a day, would have to get a day and a quarter to cover what was a day formerly, a 12-hour day.

The Master: In other words, it means that labor has gone up, because the hours of labor have gone down?

Mr. O'Brien: That would be duly taken care 16262
of in another way, but these figures do not reflect it.

The Master: Yes, they do.

Mr. O'Brien: No.

Mr. Ransom: It does not cost any more per hour on a 12-hour basis than on an 8-hour basis.

Mr. O'Brien: The hourly goes up, but the daily has not changed.

The Master: The true figure, I think, is the hourly figure. Let us analyze it. One of these men got three dollars a day. Mr. Woods has figured it at 25 cents an hour. That was for a 12-hour day. That same man today get $3 a day, 16263
but only works eight hours, the hourly price has gone up. The daily price has not gone up, but he hourly price has.

Mr. Clark: He would have to have half again as many men.

The Master: That ratio is not misleading; it is right. That is one of the difficulties that we are suffering from in this country today. Men are getting the same, or in fact, greater per diem pay for half of the time; therefore, they are getting four times as much as they did. I will not allow the question.

Mr. O'Brien: Will your Honor just note here that under the recapitulation of all hourly employees we have got 1906, 2.74 and September, 1919, 2.70.

Mr. Ransom: That is in the summer. You are comparing January with September.

Mr. O'Brien: I didn't get it up, God knows. You got it up, and why did you make it this way?

Mr. Ransom: Compare January, 1906, with January, 1919, 2.74 in January, 1906, and 3.09 in January, 1919. They have 30 more men in
16265 January, 1919, than in January, 1906.

Mr. O'Brien: The fact is, they are not working any different hours in the gas companies in New York than in 1906.

The Master: Ask your question.

Q. Mr. Woods, in 1906, how many hours a day did a given gasmaker work?

A. Twelve hours.

Q. How many hours did the boiler house men work?

A. Twelve hours.

Q. The engineer and firemen each 12 hours?

A. Right.

16266 Q. And the governor house men each 12 hours?

A. Yes.

Q. And the laborers that worked in the generator house 12 hours, and the laborers who handle coal?

A. Some might be ten hours and some 12. If it was a two-shift work they worked 12 hours. If in was a single shift they worked ten hours. I might say—

Q. Never mind you might say. Stick to what I am going to give you. In January, 1914, that you will recall was when labor was plentiful, January, 1914, were the various classes of labor embraced under the title of gas production work, working 12 hours a day?

A. They were not.

Q. Name the ones that were not.

The Master: Objection sustained as already covered.

Mr. O'Brien: He has given you a general statement that where there were two shifts, they worked twelve hours and where there was one shift they worked ten hours, and in January, 1914, Mr. Woods, what men under the title "Gas Production," worked only one shift?

The Master: Objection sustained.

Q. I mean the classes of men. 16268

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. In January, 1917, what men worked a 12-hour shift?

The Master: I will not allow that either.

By the Master:

Q. Mr. Woods, you told us a few minutes ago that certain men worked 12-hour shifts in 1906?

A. Yes, sir.

Q. They were the gas production men, generally speaking?

A. Right.

Q. Do these gas production men, generally speaking still work 12 hours? 16269

A. They do not. Where we employed two men for 24 hours at that time, we are now employing three men.

By Mr. O'Brien:

Q. When was the change made? Perhaps I can group this so you will answer one question which will cover many. When was the arrangements of hours for the employees in the gasmaking stations changed from a 12-hour basis to an eight-hour basis?

A. They were changed from a 12-hour basis to a

16270 George E. Woods, Cross.

nine-hour basis in 1911. In 1916 they were changed from a nine-hour basis to an eight-hour basis.

The Master: Just to make sure in my own mind, did not Mr. Chambers ask you those questions?

The Witness: I think so.

Q. Will you state what groups of men there were that were shifted?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Is this a correct figure here, Mr. Woods, Janu-
16271 ary, 1906, 142 men, in Gas Production, and January, 1918, 166?

A. Right.

Q. How did you figure up that increase in the face of the statement you made that they went from 12 hours to 9 hours, from a 12-hour to a 9-hour basis?

Mr. Ransom: That is objected to; it has all been covered.

The Master: I will allow it.

Mr. Ransom: Exception.

A. Because we are getting more out of a man than we got in 1906; our machines are making more gas per machine, so that our make per hour's labor is bet-
16272 ter than in 1906.

Q. You mean the results per man per hour are better than they were on the longer hour plan?

A. They are better than they were in 1906, when we were working on a 12-hour basis.

Q. Your gas makers, your boiler house men and engineers, are still on a 12-hour basis; that is, they are on a double shift?

A. They are not. We have no men on the 12-hour shift, except watchmen. Everybody else is on an 8-hour shift.

Q. Since what time?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. How do you explain this difference of only nine men in gas production in January, 1919, over 1906, if the change was made from a 12-hour basis to a 9 or 8-hour basis?

Mr. Ransom: Are you sure that is only 9?

By the Master:

Q. Just look at that, Mr. Woods. In January, 1906, you had 142 men on gas production?

A. Yes.

Q. You notice in 1919 you had 151? 16274

A. Right.

Q. And the year before that you had 161?

A. Right.

Q. How did you get down so low as 151 in January, 1919?

A. I do not recall whether we were making the same quantity of gas or not, but we are making more gas per hour of labor than we were in 1906. We are making a greater quantity per machine, the make per machine is better, and with that improvement it has affected the gas produced per hour of labor.

Q. You find you can get along with less men by reason of the perfection of the machinery? 16275

A. By reason of increased efficiency we are able to get along with fewer men in 1906. The amount of gas made in 1906, however, at these two stations, is probably less than it was in 1918.

By Mr. O'Brien:

Q. Do you mean to say, Mr. Woods, that with 151 men working on an 8-hour basis in January, 1919, you are producing more gas than you did in 1906, with 142 men working on a 12-hour basis?

The Master: Objection sustained, because it has been fully answered.

Mr. O'Brien: It has not been clearly answered, your Honor.

The Master: I sustained the objection.

Q. You have made a comparison here on the efficiency of men on both bases.

The Master: Question sustained.

Q. Will you state what you predicate that judgment on? Have you a record of it?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Is that drawn from your general experience?

16277 The Master: Objection sustained.

Q. Or have you got any group of statistics from which you made your deduction?

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Did you make your deduction from the result in the manufacturing books for the 99th Street and 21st Street stations?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Mr. Woods, why didn't you separate the groups of labor on Exhibit 351, into the same groups that

16278 were contained in the manufacturing books; that is, the groupings of generator house, purifier house, coal—that is incidentals here—why didn't you group them that way, when you had a record in the manufacturing book that had those groupings?

A. Because I didn't take into consideration what I was trying to show was the number of men employed and the rate of pay per hour.

By the Master:

Q. Mr. Woods, I notice on the page that Mr. O'Brien had just referred to, January, 1906, that in addition to the three printed columns of Generator

House, Purifier House, and Coal, somebody else has worked in another column, "Incidentals." You don't cover that any more?

A. No.

Q. But you still have incidental labor?

A. We still have miscellaneous labor, miscellaneous expense.

By Mr. O'Brien:

Q. Does the incidental labor, as used in your manufacturing book at the 99th Street and 21st Street stations in January, 1906, embrace everybody now included under miscellaneous labor in this Exhibit 351? 16280

A. I don't know that it did.

Q. Mr. Woods, I ask you to look at this manufacturing book for 1906 and refresh your memory and tell us whether or not this is an incomplete statement here where it says that there were 22 men used in the works at that time?

A. It is an incomplete statement. I have stated that before.

Q. And your statement would refer even back to 1906, would it, as to the incompleteness of the manufacturing book, wherever it referred to the labor employed in making gas?

A. That is right. 16281

Q. Is there any particular feature about generator house labor, purifying house labor, coal and incidentals that would make the data covering only that kind of labor available in making deductions in connection with the manufacture of gas?

A. As a memorandum for the superintendent, he might know, or might—

The Master: We have gone all over that.

Mr. O'Brien: Well, he can give me a succinct answer and let us pass then to some other subject.

The Master: You have tried for two days to get a succinct answer and you have not got it. No, pass along.

Mr. O'Brien: Will you read the answer?

(The answer was read.)

Q. Will you complete the statement?

The Master: Let the witness alone for a minute, will you?

A. (Continued.) I said, as a memorandum for the superintendent, he would want to know various items covering those things, those things covering those
16283 items, and would incorporate it in a book, which book in no way represents the amount of labor that was employed at that place.

Q. Well, Mr. Woods, have you ever taken this recapitulation and made any comparisons showing the presumptive increase in the cost of labor with the figures or analyses made that show the cost of different kinds of labor per thousand cubic feet of gas made?

A. I make analyses of labor conditions right along.

Q. What would you say if the various classes of labor show a decrease in cost; how would you explain that, against this showing on Exhibit 351, showing such a marked percentage of increase?

16284 Mr. Ransom: I object to the question as vague. What does he mean?

The Master: Perhaps the witness knows what he means by his request.

Mr. O'Brien: I am supposed to have the man who knows more about gas than anybody else in the country, your Honor.

Mr. Ransom: I know, but your kind of gas is not always intelligible.

Mr. O'Brien: I am getting it on the record for the purpose of protecting the defendants. Go ahead, Mr. Woods?

Mr. Ransom: I object to it.

The Witness: I do not understand the question.

Q. What?

A. I do not upnderstand your question?

Q. Are you able to say how much, on an average, it cost the complainant company to make gas in the several different years?

A. Right.

Q. Can you give us the groupings, could you say now how much in cents per thousand cubic feet of gas made the generator house cost in 1914? 16286

The Master: To make a thousand cubic feet of gas?

Mr. O'Brien: Yes.

A. I could do that. Gas production cost as of today, as I testified, would be about two and a half cents a thousand, the gas production cost. Repair labor would be a cent and a half a thousand.

Q. At what time are you talking of?

A. As of today.

Q. I asked you about 1914?

A. That would be somewhat less than that.

Q. Well, can you not give us those figures as they run in your mind? 16287

A. No, I do not recall the figures just now. I know the figure, but I can't give it to you right offhand.

Q. Why have you set up these figures in Exhibit 351 in such unusual groupings?

Mr. Ransom: I object to the comment of counsel. They are set up in groups—

Mr. O'Brien: The point is, your Honor—I do not want to spend a day on it—the point is that they come in here with a maze of figures, hoping. I suppose, that the statisticians and accountants for the defendants would spend all of their days

running around after these fireflies and neglecting the vital things in this case. They have got something that your Honor cannot use to advantage. You cannot take the analyses that are customarily made of the cost of making gas and use that exhibit to advantage. You cannot take the reports made to the Public Service Commission, that reduce to the various and customary items or classes of labor or costs, to cents per thousand cubic feet of gas made or per thousand cubic feet of gas sold, and use that exhibit. It is absolutely valueless. And it is here, as I am trying to impress the Court, it is brought in here to confuse this case and to confuse your mind, and to get our statisticians who only have a short space of time in which to work, busy and mislead them, and take them away from the vital things in this case.

16289

Mr. Ransom: Exhibit 351 shows the increase in average hourly rates of pay; Exhibit 352 shows those increases in pay year by year for the same year for each of the classes of labor incurred in cost per thousand feet of gas made.

Mr. O'Brien: Where they have put in reports every year to the Public Service Commission, sworn reports, it would be expected that they would perhaps in their exhibits reduce the figures to some kind of percentage basis, and give you something by which to make comparisons; or would you not expect that they would take the manufacturing book, a book that is kept by every gas company in the United States, with the same kind of data, that is made the basis of the monthly reports, from which annual statements are made, and would make up a comparative statement of the employment of labor used in making gas as of

16290

different years, so that they might, by that comparison aid your Honor?

Mr. Ransom: All these reports to the Public Service Commission are available to the defendant, and all these statistical studies are being examined by the defendant. Those statistical studies among those your Honor has rejected—

Mr. O'Brien: I have got to start in and spend a lot of time on these exhibits in order to get the record straight, although I do not think they are going to help the Court at all; but in order that they may not go undenied and unanalyzed, I have 16292 got to spend the time on them.

Now, I respectfully submit, that instead of getting out some valueless papers of that kind, they could come in here—take the manufacturing book, here is the record of January, 1906, and they have the report over there. They can take the same manufacturing book for January, 1916, and make some comparisons. That would not cover the cost of labor, but at least it would cover the quantity of the several classes of labor named in those columns. They could make some comparison of it, and then you would have something that would be substantiated by the rec- 16293 ord. But a statistician or bookkeeper taking that up has got to spend a lot of time, and maybe after it is all over and his days are gone, at an expense to the defense, the paper is not going to be worth much in the case, for the reason that it is only more or less descriptive evidence, it does not give your Honor the vital things on which you can work.

Mr. Ransom: It shows the enormous increase in these wages with which this company is having to deal.

16294 George E. Woods, Cross.

Mr. O'Brien: It is just about as valuable as the batting averages and the fielding averages for a lot of baseball fans, and it does not give you as accurate information as they do.

Mr. Ransom: The only trouble with counsel for the defendant, Edward Swann, is that the complainant has not offered these manufacturing records as a primary exhibit in the case. His specialty is trying to break up manufacturing records.

Mr. O'Brien: Your Honor, at this time, with
16295 your permission I will read you from the manufacturing book for the 99th Street station, the amount of labor, January, 1906, to bear out what I am saying to you. We have there, say on the first of January—I hope you will not say that is misleading, because I will take that day—ten under generator house, three under purifying house, one under coal and eight under incidentals, a total of twenty-two.

Now, we have got to assume there was some reason for putting those there. Taking Mr. Woods' statement as correct, that it does not embrace everybody employed in manufacturing
16296 gas, we have got to give them credit for having some sense and having some reason and a reasonable purpose in having that notation in the book. It records twenty-two men.

You turn to the same period in 1918, and we have eleven in the generator house, three in the purifier house, two at coal, nine at tools; under the title "Tools"; twenty-five in all.

We turn to January, 1919, and we have twenty-two again, a total of twenty-two.

Now, I will refer to the year 1916. January, 1916, and it is reduced to number of days labor,

16297

not number of laborers, but number of days labor. The number of days labor we find for January, 1916, boiler house, two, generator house, ten, purifying house, one, and handling, one; a total of seventeen. That would seem to run from—

The Master: You see, it is quite apparent from what you have just read, that they have excluded the incidental labor there, they have put in "Handling" there where it may not have been in the other. Those things are not much use.

16298

Mr. Ransom: They are simply setting up a straw man in order to take up time.

The Master: Those things are not much use.

Mr. O'Brien: Your Honor, if you come to 1917 we find for the same week 16.

The Master: How many on tools or incidentals?

Mr. O'Brien: No tools are mentioned.

The Master: And no incidentals?

Mr. O'Brien: I assume that they used handling—

The Master: It is quite apparent that that labor record on those books is not worth a whole lot.

16299

Mr. O'Brien: Take the time they are using the same terms, take it from 1916 on, where the headings are boiler house, generator house, purifier house and handling, and I will read to you the showing. You have two under boiler house —that is in January, 1916—ten under generator house, one under purifier house, four under handling, a total of seventeen.

And then they have reduced that to gas made per day's labor. Now, they put a figure in there

under that heading, gas made per day's labor, and we have got to assume that they must have thought that these particular groupings of men were valuable in giving them a reliable figure as to gas made per day's labor. It is to be presumed that they intended to embrace every bit of labor that was engaged in making gas.

Now for January, 1917, here is what we have as a showing boiler house, two; generator house, two; purifying house, one; handling, three; a total of sixteen. And the gas made per day's
16301 labor 254.625, as against 227.765 in January of 1916.

Now, turning to January of 1918, you have under the same groupings ten under boiler house, one under generator house, two under purifier house, one under handling, a total of fourteen. And for January, 1919—

The Witness: What under generator house?

The Master: Wait.

Mr. O'Brien: You have three under boiler house, fifteen under generator house, one under purifier house, one under handling, a total of twenty.

16302 Now, those are the books of the company as kept at the works by the superintendent of the works or his assistant, and I submit that the comparisons should be made from the sources of original entry in some uniform method, so that if it is to be checked up at all to determine the worth and the weight of the exhibits that have been put in, our men will have something to guide them. As it is they cannot go to Mr. Woods' data and get those figures; they have got to make their own groupings.

The Master: I can only take what is offered. I cannot direct them to do anything.

By Mr. O'Brien:

Q. Well, coming back to the paper here, the source of information being Exhibit 359, I will ask you, Mr. Woods, whether the time records were missing for January 1st, 1906, for 21st Street, 44th Street, 42nd Street, 63rd and 65th Streets, 99th Street, 111th, 132nd and Kingsbridge and street department for that time?

A. No, I do not think they were missing.

Q. Did you have them when you made up Exhibits 351 and those that follow?

A. I think we had most of the time books and the 16304
pay roll sheets.

Q. Well, why were they not embodied here in this record?

A. Because that is where the information came from, as indicated on that memorandum.

Q. What?

A. The information came from the record as indicated on that memorandum.

Q. Well, why did you not use the time books as to that particular period and those particular stations?

A. No particular reason, except that we had the other.

Q. Well, I see here you have got opposite shop 16305
department, "Pay roll and time records"?

A. Yes.

Q. You did use it there?

A. Yes, we had both.

Q. Now, are you sure whether the time books are in existence or not?

A. I think they are, Mr. O'Brien, yes.

Q. Well now, think it over.

Mr. Ransom: Objected to.

The Master: Objection sustained. I will not permit any further questions on this line.

16306 George E. Woods, Cross.

Q. I note that the same inscription is made on this paper for January 1st, 1914. I will ask you now—

Mr. Ransom: Objected to.

Q. (Continued.) If you had before you, when you made up your exhibits, the time books?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Mr. Woods, does this Exhibit 359 contain all the sources of information from which you constructed your exhibit?

Mr. Ransom: Which exhibit?

16307 The Master: 351 is all I am going to let him refer to.

The Witness: Yes.

Q. Then as to those years where you only have the pay roll book we will assume you did not use the time books?

Mr. Ransom: Objected to.

The Master: Objection sustained. I suggested I did not want to hear any more questions about that.

Mr. O'Brien: I thought I would make it definite.

The Master: You are over anxious. You
16308 cover a thing fully, and then you want to go over it again.

Mr. O'Brien: I move now to strike out Exhibit 351 on the ground that it now appears from the testimony of the witness Woods that he did not have the source of original entry, original information, that is the time books, in making up that exhibit.

The Master: Motion denied.

Mr. O'Brien: Exception.

Q. Have you made up any exhibit that gives a comparative statement of the day's pay of each man and the increases from year to year?

A. I have not.

Q. Have you made up any exhibits that shows the comparative statement from year to year of the cost of making gas at 99th Street and 21st Street?

A. I have such information. I have not made up any exhibits, no.

Q. Have you got it in an analitical table that shows the cost of each kind of labor that may be checked up with any books and records?

A. I have not.

Q. Have you made up for the purpose of testifying here a comparative table covering the years from 16310
1906 on, or some of those years, as to certain similar months of the year, which would indicate the cost of making gas in 99th Street and 21st Street, as per your books and records, with the cost analysis and segregated for various classes of labor and material?

Mr. Ransom: I object to the question. It speaks for itself, these exhibits speak for themselves. He has examined at great length on these exhibits.

The Master: Do you remember that question?

The Witness: I do not, your Honor.

The Master: I could not follow it. 16311

Mr. O'Brien: Well, it is simply—

The Master: It is a long rambling argumentative question.

Mr. O'Brien: There is nothing rambling about it. He could come in here with a table where you have got the cost of making gas in each station.

The Master: He could do a lot of things, but you are cross-examining him on what he did do.

Mr. O'Brien: No, I want to find out how far they are trying to aid the Court.

16312 George E. Woods, Cross.

The Master: Objection sustained. What I want you to do is to cross-examine this witness as to the matters that he offers in proof here and find out whether they are correct or not, not what he might have done in some other way to aid the Court.

Mr. O'Brien: I take an exception to your Honor's ruling.

Q. You have a notation here on Exhibit 351, a grouping called "shop department."

A. Right.

16313 Q. Where is that located?

A. The shop?

Q. Yes.

A. Hester Street, Second Avenue, Hester Street and—

Q. When you say Second Avenue, where do you mean?

A. Second Avenue and 20th Street; 159th Street; 66th Street, on the west side.

Q. Go ahead, I want every one of them, you know, I don't want a birdseye view?

A. 111th Street and First Avenue.

Q. Where is the shop at 111th Street?

16314 A. 111th Street and First Avenue.

Q. You mean up there, the repair shop?

A. Yes.

Q. Meter repair shop?

A. Yes.

Q. Appliances?

A. That is the meter shops that you are speaking of, the meter shops.

Q. Well, they work on appliances there, too?

A. Yes, appliance work is done in that building.

Q. I mean, your men that are embraced in this group work on appliances, don't they?

A. There may be some appliances repaired in the shop, in that particular shop, yes.

Q. Where else?

A. I have given the Hester Street shop, Second Avenue shop.

The Master: You have given all that you remember?

The Witness: I have, yes.

Q. How about 17th Street?

A. That is not a shop, that is the street and mains department, mains and services.

Q. Are all those men charged up to the street department? 16316

Mr. Ransom: All of what men? I object to the question.

Mr. O'Brien: Well now, the witness is not quite as dense as counsel.

The Master: The Court is almost as dense as counsel. Which men do you mean?

Mr. O'Brien: I have asked him about—does that include 17th Street.

Mr. Ransom: That is not what you asked him.

Mr. O'Brien: He said 17th Street, the mains —I will ask the stenographer to read the question, and you will see how obvious it is. 16317

The Master: No, you won't. Ask your question again.

Mr. O'Brien: The last question referred to 17th Street, and I said are they all the men?

Mr. Ransom: All those men.

The Master: Do you mean the men in 17th Street?

Mr. O'Brien: Yes.

The Master: Are all the men in 17th Street charged to mains and services?

The Witness: They are in the mains and service department, and would be charged to mains and services, either to the Consolidated or some other company.

The Master: Not in the shop department?

The Witness: No.

Q. The machinists there are charged to the street department?

A. If there are machinists there, they would be charged to mains and service department.

Q. Why do you say "if" all the time? Don't you
16319 know who is there?

A. No; I am not there every day.

Q. Don't you see their pay rolls?

A. I see their pay rolls. I do not see them every day.

Q. Don't you see the quantity of work they are turning out?

A. Not all, no.

Q. Well, you have included in your exhibit here a certain cents per thousand feet for street department, haven't you?

A. Right. I know from my own knowledge and experience what it takes and requires.

16320 Q. To what department is the blacksmith there charged up at 17th Street?

A. Charged to the department of mains and services.

Q. And you are certain that nobody working at 17th Street, I mean the plot running through from 17th to 18th Street, is charged up to any department except the street department, are you?

A. I should say there might be a time that they might do a little work for the shop department, in which case they would charge the shop department for that work?

16321

Q. Well, now, are there any other places where men are employed? How about that school up there at 99th Street and Second Avenue, or I mean 111th Street and Second Avenue?

A. Well, what about it?

Q. Oh, the stable there, where they train men.

A. Yes, that is charged to the department of—

Q. To dig in the ground?

A. Department of mains and services.

Q. Is there anybody in that department, the northwest corner of 111th Street and First Avenue, is there anybody there that is charged—that is included in this grouping here, shop department?

16322

A. No, not of that particular—

Q. 159th Street is used for repairing appliances, is it?

A. They may repair appliances in the shop there sometimes. They are setting up meters, doing jobbing, bringing meters in and handling complaints of all kinds.

Q. Do they cover just a certain territory, 159th Street.

A. Yes, they have a certain section.

Q. What is that section?

A. They cover all Washington Heights down to about 145th Street, and then from 145th Street south, they run to 110th Street, everything west of St. Nicholas Avenue.

16323

Q. Well, then you have, so far as shop work goes, the city divided, the borough divided geographically?

A. Yes.

Q. Well, what territories are taken care of by the other shops?

The Master: Objection sustained.

Mr. Ransom: That has already been covered.

The Master: I don't know whether it has

been covered, but it is not important enough to waste an hour.

Mr. Ransom: It has been covered, I think, by two witnesses.

Mr. O'Brien: Exception.

Q. Mr. Woods, will you state the number of men in each one of those stations embraced within the number of 410 opposite January, 1906, under the grouping shop department.

A. Will I state the number of men?

Q. In each station?

16325 A. No; I haven't got it.

Q. Is there any paper with you in court that will refresh your memory so you can tell us the number of men in each station embraced under that number?

A. There is not.

Q. I ask you the same questions as to January, 1914, January, 1917, 1918, 1919, and September of 1919?

A. No, I haven't them segregated.

Q. Have you preserved in your files where they might be available for the defendants' investigators, the various figures that make up these totals, under

16326 the title "Shop Department," for those periods?

A. Yes, probably.

Q. Probably?

The Master: Yes what?

The Witness: Yes, I think we have that information.

The Master: Well, isn't it in your pay roll books?

The Witness: The pay roll books, yes, it is all in the pay roll books. He asked if I had segregated it, and I think I have.

Q. It is all in the pay roll books?

A. Pay roll or time records.

Q. Well, don't you know?

A. I know that it is in one or the other, that I looked through both, and I cannot remember just now what I did look at on a lot of these things.

Q. Well, it was only three or four weeks ago you looked at this, isn't it?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Mr. Ransom: Mr. O'Brien has asked an omnibus question.

The Master: I have requested, repeatedly, Mr. Ransom, when I have ruled, not to start a 16328
discussion. Every time you start to say something, it calls forth a reply from Mr. O'Brien, and then a sur-reply from you, and back and forth, and I am trying to stop it.

Mr. O'Brien: He is patronizing; he is giving his approval.

The Master: That applies to yourself as well.

Mr. O'Brien: He thinks he is up in the Public Service Commission yet.

The Master: Maybe he thinks he is on the City Court bench.

Mr. O'Brien: Both.

Mr. Ransom: From the tactics of counsel I 16329
am reminded of the City Court.

The Master: I am trying to stop this thing. Go along; ask the next question?

Q. Mr. Woods, is that taken care of in any permanent book or is it a record you made for the purpose that will give us the segregations?

A. That was taken from the pay rolls. Either the pay rolls or time books. Whether I have the original records, I am not sure.

Q. Well, now, for the different years you have, in regard to the shop department segregation here, for

January, 1906, the pay roll and time records, January, 1, 1914, the pay roll and time records; January 1, 1917, the pay roll; January 1, 1918, the time record; January 1, 1919, the time records; September 20, 1919, the time records. And the time records in each case have gone back to the shops, have they, from whence they were brought?

A. They have.

Q. They were sent back just after you got through with them?

A. Yes.

16331 Q. The pay rolls are at the main office yet?

A. Yes.

Q. Isn't there any pay roll where the groups of shop employees for each station are separated and segregated?

A. There would be separate pay rolls for each shop.

Q. And would one going over this record, have to go to any other books to get one or two or more employees to be added in order to verify your totals in 351?

A. Not if you got it from the pay roll.

Q. It could all be gotten from the pay roll?

16332 A. Yes.

Q. Well, is that true as to the periods you say were covered by time records?

A. Right.

Q. Or from the pay rolls?

A. It would be on the pay rolls, which is the time record.

Q. And all of the data necessary to get the wage per hour?

A. Yes, sir.

Q. Mr. Woods, did you keep a line on the work done on appliances, the business of appliances?

A. No.

Q. Are you connected in any way with that branch of the complainant's business? I mean officially, does that come within the scope of your duties?

A. What, handling appliances?

Q. The handling or repairing?

A. Only such repairs as might be made in the shops themselves.

Q. Well, are the shops under your jurisdiction?

A. No, only in an indirect way. The shops are in the control of Mr. Turner, and Mr. Turner on all matters connected with the commercial department, in which he receives a great many orders as to the set- 16334
ting of meters and locking of meters, setting of appliances and attending to complaints, and so forth, he keeps in touch with the commercial department in that connection. In the matter of supplies and purchase of supplies, he is in connection with Mr. Gawtry, and only insofar as it pertains to the mechanical department—claims that might come up in connection with the mechanical department are referred to the engineering department, Mr. Bradley or myself.

Q. Well, Mr. Turner then would have charge of repairs to appliances, would he?

A. He would have charge of repairs to such appliances as were repaired by his men. If they were 16335
sent to 111th Street, to the repair shop department where they make the repairs, they would come under somebody else. If they let them out to be repaired—

Q. Well, so far as supervising the work in those shops, is that under you?

A. Supervising the work? No, it is not.

Q. Does the 111th Street repair shop make report to you?

A. No.

Q. Take orders from you?

A. No. The only thing would be in connection—

16336 George E. Woods, Cross.

Q. That is a matter outside of your domain?

A. Yes. The domain of the meter department, so far as the engineering department, is only in connection with those things that might be of an engineering nature, which they would want to consult us about.

Q. Then that applies, what you have said about shop applies to the mains, too?

A. No, not to the mains at all.

Q. Well, you said mains and meters department only as to engineering questions?

16337 A. No, I said the shop department. The mains and services come directly under the engineering department, absolutely.

Q. I see. Well, now, then the jurisdiction—you haven't any jurisdiction over these shops?

The Master: He has answered that. He told us what his connection was.

Q. Well, at 111th Street there is no mains repair?

A. There is a repair of mains and services department at 111th Street.

Q. Where?

A. At 111th Street and First Avenue.

16338 Q. At what corner?

A. In the building there, 111th Street, southeast corner.

Q. You mean the Standard Gas Company's building?

A. Yes.

Q. You say they repair mains there?

A. Oh, they repair mains where the mains are to be repaired.

Q. What floor?

A. Where they repair mains?

Q. Yes.

The Master: Oh, the witness says they repair the mains out on the street; they have some sort of a headquarters there, I suppose.

Mr. O'Brien: We have a right to ask him about the 111th Street building, your Honor.

The Master: Go ahead, ask him.

Q. Can you state where?

A. They repair mains?

Q. Yes.

A. All over the city.

The Master: Where is the headquarters for the repair gang there? 16340

The Witness: The repair gang, they have offices in that building, and they have a space at the back of it there. I do not recall just the floor now, Mr. O'Brien.

Q. You mean Mr. Cornine's department?

A. No, Mr. Cornine doesn't—that is not in Mr. Cornine's department at all.

Q. Well, Mr. Kelly's?

A. Mr. Kelly is in the Standard Gas Company's department. Mr. Kelly has charge of—

Q. Well, who has charge of this mains department you speak about?

A. Mr. Simpson.

16341

Q. Mr. Simpson?

A. Yes.

Q. Is he under you?

A. Yes.

Q. Well, now have you in getting up this Exhibit 351, so far as it relates to the shop department, made any investigation or analysis of the development and increase in the business of the complainant company in appliances?

A. No. I was only trying to make up a statement as to the relative rates of pay as of 1906 and 1918.

Q. Do you know approximately how much the appliance business of the company has increased from 1906 down to date?

Mr. Ransom: I object to this line of inquiry. It is immaterial, quite outside of the issues in this case.

Mr. O'Brien: When I get through, your Honor, with this line of inquiry, I am going to move again to have this exhibit stricken from the record.

The Master: Well, I think that inquiry as to
16343 what the increase has been in the appliance business is a little far away.

Mr. Ransom: Your Honor has not permitted me to interrogate this witness upon matters connected with the commercial department and general office expenses.

The Master: Mr. O'Brien is trying to develop the point that this witness does not know anything about the shop department and the expense of it, that is on this Exhibit 351.

Mr. Ransom: Well, if he wants to show anything with respect to this—

The Master: I will allow that last question.
16344 What is the increase, if you know, in the appliance business?

A. I don't know just exactly. The increase has been very large since 1906.

Q. Have you brought here any data that will enable you to segregate the amounts of labor under the grouping "Shop Department" into those that are used in connection with "Street and Mains Department," and those that are used on meters and those that are used on repairs to appliances and the setting up of appliances.

Mr. Ransom: I object to the question. That

is not what your Honor allowed a few minutes ago at all. That is going into a very different matter. This exhibit relates to the rates of pay in those departments, and what he is now endeavoring to have this witness do is to make some segregation to show how many men are in the appliance department.

The Master: Well, why isn't he entitled to show that in support of his argument that the appliance business is not part of the gas business?

Mr. O'Brien: I want to find out why in 1906, 16346
among other things, they paid somebody who was connected with ranges more than they paid the engineers and gas makers in the group called "Gas Production."

Mr. Ransom: There has been a great increase in this appliance business, and it has been a very profitable business, and the proceeds have been credited to the benefit of the consumer.

The Master: I will allow the question. Read the question.

(The question was read by the stenographer.)

A. I have not.

Q. Have you made any separation in the data that 16347
was a basis of 351 that will set apart those who were engaged on appliances, either repairs, or setting them up in the new from the other classes of labor embraced under that group?

Mr. Ransom: Objected to as immaterial, not cross-examination.

The Master: I will allow it.

A. I have not.

Q. Are there any records in the company's offices from which you may make an analysis showing a comparison in wages on an hourly basis for the sev-

eral periods of all of those engaged in work concerning appliances?

Mr. Ransom: I object to that on the same grounds. It is not cross-examination.

The Master: I will allow it.

Mr. Ransom: Exception.

A. There can't be segregation. A man setting appliances might do other work, setting meters, repairing leaks. All the first-class fitters would set appliances and do other kinds of work. The segregation could be made.

16349 Q. You could make it?

The Master: Objection sustained.

Mr. O'Brien: I want to know the records.

Q. Where could you make it?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Has such a segregation been made in the records of the company?

Mr. Ransom: Objected to.

The Master: I will allow the witness to say whether there has been or not.

A. I have not made such a segregation.

The Master: Do you know whether there is

16350 any such?

The Witness: I do not.

Q. Who furnished you the data from which you made up this grouping, shop department?

A. Through the superintendents of the various shops.

Q. Did they send you in the special data of this particular work?

A. No, they brought in their time records from which this information was taken in my office.

Q. And Mr. Viebrock and Mr. Carter and Mr. Rogers transposed the figures?

A. They assisted, also assisted by the superintendents and their clerks in the various shops.

Q. Do you know whether the superintendents of the shops separate the work done on appliances from the other work?

Mr. Ransom: Objected to.

The Master: I will let him answer.

Mr. Ransom: Exception.

A. Yes.

Q. They do?

A. They do. They report the kinds of work, they report what work they have done for the day, different kinds of work, setting appliances or whatever it may be. 16352

Q. Well, there are men that are employed in the street department that do work on appliances?

A. Right.

Q. The setters and fitters are engaged in that?

A. In the shop department. In the shop department they do.

Q. Men that are on the street pay roll?

A. On the shop pay roll.

Mr. Ransom: I object to this effort to confuse.

Mr. O'Brien: I don't want to confuse anybody, I want him to state it. 16353

Mr. Ransom: He says, "Shop," and you say "Street."

Q. Are there men in the shop department engaged in doing street work?

A. There are not.

Q. Are there any men in the shop department that do work on appliances and at the same time do Street Department labor?

A. The Street Department is a Mains and Service Department, what we call the Street Department is

16354 George E. Woods, Cross.

the Mains and Service Department and is separate and distinct from the Shop Department.

The Master: Do the men that work in the Shop Department go out on mains and streets?

The Witness: They do not.

Q. Who makes the connections between services and meters?

A. The Shop Department will set the meters.

Q. Does the Street Department have anything to do with that?

A. No, they put the services in, and from that on
16355 the Shop Department handles it.

Q. Then may we assume, so far as the records of the company are concerned, from 1906 to date, that all of the work from the time the service is installed in a given house is done by the Shop Department?

A. Right.

Q. The putting in of meters, taking them out, setting stoves and taking them out, repairing stoves, investigation of leaks, and all such work, is done by the Shop Department?

A. That is right.

Q. So that no work done on the consumers' premises is done by anybody except those in the Shop De-
16356 partment?

A. No, except where there is an investigation of a leak. If there should be a leak at nighttime the Emergency Department would be called out, which is in charge of the men in the Service Department. If there should be a leak, and they were notified, they might stop a leak inside of an apartment. The Emergency Department, which is in charge of the Mains and Service Department would take care of a leak in the consumers' premises.

Q. Well, this Emergency Department takes care of cases of asphyxiation?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Ransom: We will have asphyxiation here in a few moments.

Q. Mr. Woods, does the Shop Department take care of the investigation of appliances?

A. They do.

Q. Then these ladies who go out to find out whether a range is in bad order or interfering with the cooking in a house, they are in the Shop Department?

A. No, they are in the Commercial Department.

Q. What is the line of demarkation between one 16358
department and the other, so far as investigation of these appliances is concerned?

A. Well, insofar as—if complaints come in as to trouble, a leak, a stove working badly, something wrong, any complaint of any kind, it would be reported to the office, who in turn would report it to the shop. The Commercial Department would report to the Shop Department, make out a ticket with the complaint, and this would be handled by the Shop Department.

Q. So that so far as the complaints are concerned that is all taken care of by the Commercial Department up to the time when the company proceeds to 16359
do something about the appliances or the leaks?

A. The complaint is received by the Commercial Department and turned over by it to the Shop Department for action.

Q. So, when there is a charge made for labor or material in connection with putting in a new range, that is work done by the Shop Department?

A. That is right.

Q. And the material furnished from the Shop Department?

A. Right.

16360 George E. Woods, Cross.

Q. The data for the Mains and Service Department I suppose you got from that department, did you?

A. I did.

Q. Did the several foremen or superintendents of various stations bring that data to you?

A. No, I got them through—had the data sent to my office to Mr. Simpson, Mr. Travis and Mr. Kingsbury. I worked in connection with those in getting up the data.

Q. Are Mr. Travis and Mr. Kingsbury, assistants
16361 to Mr. Simpson?

A. They are.

Q. Engineers, are they, or just clerks?

A. Mr. Travis is an engineer and Mr. Kingsbury is chief clerk.

Q. Do you know the several groupings of men under the totals in this paragraph, Mains and Service Department?

A. The groupings?

Q. Yes.

A. Yes.

Q. Have you got them?

A. The kind of men?

16362 Q. Yes.

A. It is made up of general foremen, district foremen, skilled workmen, laborers, drivers, dripmen, watchmen, patrolmen, carpenters, blacksmiths and welders.

Q. Are there any other classes of labor embraced in that group, main and service department, than those you have just enumerated?

A. I think I called them all, patrolmen and emergency men, chauffeurs, I think I called all that were on the list.

Q. Well, will you give us the number now?

A. The number of the different classifications?

Q. Give us the number of each and the wages?

Mr. Ransom: As of what date?

Q. As of all these periods. How are we going to get the data, your Honor? Nobody can follow that unless he gets it in the record.

Mr. Ransom: I will consent it go in the record. It is Exhibit 358 for identification.

By the Master:

Q. Have you made a tabulation of the material Mr. O'Brien has asked for?

A. Made up in tabulation. 16364

Q. That is No. 358 for identification, is it not?

A. Right.

Q. A copy of which was given Mr. O'Brien several weeks ago?

A. Right.

The Master: Objection sustained. It is a waste of time to have it spread on the record; you have got the information.

Mr. O'Brien: But where is a man going to go who wants to investigate and check this up? Where is he going to go to get the information that is embodied on here?

The Master: I do not know. 16365

Mr. O'Brien: That is all I want to find out, by this particular question.

Mr. Ransom: If the representatives of the defendant Swann would come to the office of the gas company they would find they would get these things.

The Master: You will have to ask another question. I will not allow that.

By Mr. O'Brien:

Q. Was all the information that you had on which to predicate your figures here under the title mains

16366 George E. Woods, Cross.

and service department, contained in the pay rolls of the street department for all of the years mentioned?

A. It was.

Q. Did you use any time books?

A. If I might refresh my memory by looking at that card I could tell you (witness examines paper). No, it is the pay rolls throughout.

Q. Did they always use the pay rolls in the street department?

Mr. Ransom: Objected to.

16367 The Master: Objection sustained.

Q. The street or main department?

The Master: Objection sustained.

Q. Did they use a pay roll in 1906?

The Master: Objection sustained.

Q. In the street and main department?

The Master: Objection sustained.

Mr. O'Brien: Well, it is important, your Honor; I do not think they were paid by pay roll, they had numbers.

The Master: I do not care.

Q. Were these pay rolls signed by the men who received the money, Mr. Woods?

16368 Mr. Ransom: Objected to.

The Master: Sustained.

Q. Are you able to answer that question as to whether you used any other records or papers than pay rolls in making up these figures for the mains and service department?

Mr. Ransom: Objected to as already answered.

Objection sustained.

Mr. O'Brien: Exception.

Q. Were the pay rolls that were submitted to you,

from which you got entirely the information for the figures under mains and service department, all Consolidated Gas Company pay rolls?

A. They were.

Q. Did they embrace men and money that was paid out on account of the other companies?

Mr. Ransom: Objected to.

The Master: I will allow that.

A. They did. They embraced men.

Q. Who made the separation for the purposes of this tabulation that you have given here in Exhibit 351, of what work was done for Consolidated Gas 16370
Company and what work was done for other companies?

A. This segregation as of this day was based upon a percentage—

Q. As of what day?

A. As of the date this was taken, the percentage or the number of men employed by the Consolidated Gas Company was based upon a percentage applicable to the year. In other words—

Q. Then it was taken from the pay rolls?

Mr. Ransom: Let him finish.

The Master: Let him finish.

A. (Continued.) It was taken, they were taken 16371
from the pay roll, but insofar as a particular pay roll was concerned, it said in 1906 forty-three per cent of the number of men on the pay roll were working for and in the interest of the Consolidated Gas Company, the balance of the men being employed for and in the interest of other companies. In the year 1914 it was—

Q. Forty-three was the percentage used for 1906?

A. For 1906, and forty-one in 1914, fifty-one in 1918, fifty-one on January 1st, 1919, and fifty-one on September 20, 1919.

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Q. These percentages were taken off the pay rolls at the time you made up this exhibit?

A. No, the percentages were taken off the total pay rolls for the year, based upon the ratio in which the Consolidated Gas Company was doing work for other companies.

Q. Did the pay roll for January, 1906, contain a separation?

A. It did not.

Q. Into these two classes of employees, those who were working on account of the Consolidated Gas
16373 Company and those working for the other companies?

A. It did not.

Q. Then you had to make this division on these percentages that you have mentioned, yourself, when you were preparing this exhibit?

A. Right.

Q. Who told you to use those percentages?

A. I got those figures from the accounting department, to find the expenditures of the street main department and how much of their expense was for other companies.

Q. Why do you not get it from Mr. Simpson's department?

16374 A. I worked in conjunction with Mr. Simpson. The information was gotten, however, from the Accounting Department.

Q. Did you ask them why they made it forty-three per cent?

A. Yes, because that was the rate, that was the percentage of work—

Q. I asked you if you asked them that?

Mr. Ransom: Wait a minute, sir.

A. I did ask them for that.

Q. What did they say?

A. That during the period of 1906 the amount of work being done for other companies was fifty-seven per cent of the whole, so that forty-three per cent was applicable to the Consolidated Gas Company. As of that particular date there was no segregation.

Q. I see. Well, who gave you that percentage, Mr. Brundage?

A. No, I did not get it from Mr. Brundage; I got it from—

Q. Mr. Carter?

A. No.

Q. Mr. Teele? 16376

A. No.

Q. Some one working for Mr. Teele?

A. No.

By the Master:

Q. Where did you get it?

A. I got it in the Accounting Department. I think I got it from—I will tell you the name in just a second—Mr. Bischoff.

By Mr. O'Brien:

Q. Bischoff: what is his position?

A. He is one of the chief accountants in the Accounting Department.

Q. Of the complainant company? 16377

A. Right.

Q. He works under Mr. Brundage, then?

A. Mr. Brundage and Mr. Armstrong.

Q. Did you talk with Mr. Teele or any of his men about it?

A. I did not.

Q. You know Mr. Teele?

A. I do.

Q. You had talked with him about this case?

Mr. Ransom: Objected to.

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The Master: Objected sustained.

Mr. O'Brien: Exception.

Q. Did the same Mr. Bischoff give you the percentages to use for the other years?

A. He did.

Q. And what did he say about them?

A. I do not know as he said anything. I asked for the total figures of the Consolidated pay rolls.

Q. Just tell us what you did ask him?

A. Consolidated pay rolls on street main and service department and how much of the total pay roll
16379 was charged to other companies, so that I could segregate and charge a certain percentage of the labor to the Consolidated Gas Company for the purpose of making up this computation.

Q. Well, then, you knew already that they had made some separations on the books, did you?

A. I knew—

Q. (Continuing.) Into the work done for the complainant company and the work done for other companies?

A. Yes, I knew other companies were being charged for all the work; all the work that was being done for the other companies is charged—directly to those com-
16380 panies.

The Master: Just answer the question. You knew that that was being done?

The Witness: I did.

Q. Did the accountants hand you the sum total of work being done and the number of men employed for the whole Street Department?

A. No, they did not do that.

Q. And leave it to you to work out the percentage?

A. No, they gave me the amount of money, that represented the amount of money.

Q. How did they give you, the total for each year?

A. Yes, the total for each year and the segregation, and I found a percentage which applied to the Consolidated Gas Company and what applied to the other companies.

Q. And how did you reduce that to the daily basis?

A. That was a matter of percentage.

Q. How did you do it?

A. Having found that the Consolidated expense as of one year was forty-three or fifty-one per cent for the year, for the purpose of this computation I took forty-three or fifty-one per cent, whatever the figure 16382
may have been, as being applicable to the Consolidated Gas Company.

By the Master:

Q. For every day?

A. For every day.

By Mr. O'Brien:

Q. You say having found that; you mean, having received that percentage from the Accounting Department?

A. Having gotten the amount of money from the Accounting Department, having found then the ratio—

Q. Wait a minute now. Just get this right. What 16383
money did you get from the Accounting Department? Just get to the concrete here, January, 1906; limit the figure that you got from them?

A. I have not the figure.

Q. You have not got it?

A. No.

Q. On any paper or any exhibit?

A. No.

Q. Can you not say what it is?

A. No. I should say I got the sum total of the

expenditures of the Consolidated Gas Company's operation for their Main and Service Department.

Q. For the whole year?

A. For a year, and found out to what extent they were doing work for other companies, and in the matter of this computation used that same percentage.

Q. Wait a minute, Mr. Woods. You told the Court, did you not, that the Accounting Department gave you the percentage, this forty-three per cent, was it?

16385 A. They gave me the amount of money, and we calculated the percentage.

Q. Oh, you calculated the percentage?

A. Gave the total expenditure of the company's Main and Service Department.

Q. For 1906?

A. For all these years.

A. And then where did you go to find out how much of that total represented work done for the other companies?

The Master: Objection sustained. The witness has fully described the fact that the Accounting Department told him how much the

16386 total labor costs were against the mains and services, and what the total amount was charged to other companies, and he figured up what percentage was applicable to the Consolidated, which was either forty-three or fifty-one, and I will not permit any further questions.

Mr. O'Brien: He did not say that in the beginning. He is trying to say that now.

The Master: Well, he has said it.

Mr. O'Brien: He is trying to say it now.

The Master: No; next question: I will not allow that.

Q. You went through the same process for each of the other years?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Well, I would like to ask the witness, your Honor, whether the actual percentage was figured out by him as to these years, or by the accounting department.

The Master: My ruling is that it is fully covered.

Q. You did not use any data in your own office to check up the figures they gave you, to see whether 16388 those percentages were correct?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Did you use any data, any reports from Mr. Simpson's department, to check up this information which you say you received from the Accountancy Department, to determine whether or not it was correct?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Did you include all the work that was done on 16389 jointly used facilities?

Mr. Ransom: I object to this line of questions. It is quite immaterial in showing the rates of pay in the department and the increase.

The Master: Objection sustained.

Mr. Ransom: All that he undertook to show ir this exhibit was the increase in the rate of pay.

Mr. O'Brien: Well, I would like to ask your Honor now, just off the record, to look over this

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and see whether we can leave this thing pass as it is

(Here followed discussion off the record.)

Mr. Ransom: The witness has explained to counsel a complete statement of the wages paid to each class of labor in that department in each year.

The Master: Next question.

Q. How do you explain these variations in maximum hourly rate for different groups of men embraced in Exhibit 351? For illustration, forty cents
16391 an hour for those who produced the gas in 1906—no, thirty-nine cents an hour for those who produced the gas in 1906, and forty cents an hour for those who are working out on the streets.

Mr. Ransom: I object to the question. It is perfectly trifling comparison and part of a mere program of time-killing.

The Master: I will allow it.

Mr. Ransom: Exception.

A. That is what we were paying the men in the plants and that is what we were paying the men on the streets.

16392 Q. I am asking you, how do you explain this variance between the maximum rate per hour for those engaged in repairing meters and appliances, of 46.67 in January, 1906, with the pay given to those men who were actually producing the gas engineers, gas makers, et cetera, in the shops?

A. Well, the 46 2/3 or .67 that you speak of, was for an assistant superintendent in the Shop Department.

Q. Oh, you have rung him in there?

A. Yes.

Q. Why didn't you take in the superintendent of the works?

A. Because this man was on the pay roll.

Q. Are there any other overhead men included?

Mr. Ransom: I object to the term "overhead."

Mr. O'Brien: He can use his own term. That is the label I will put on it. He can call them anything he wants to

A. It is part of the operation of the shop. The men in charge of the shop under the superintendent, the superintendent is paid a weekly wage, and on the weekly pay roll, and his time is converted into an hourly rate.

Q. You think this particular salary is what boosts 16394
it to 46.67, do you?

A. That would make the maximum rate. However, the rate is a weighted average.

Q. You have not forgotten, have you, that you are dealing with 410 men? They are not all assistant superintendents are they?

A. We have the weighted average there.

Q. Is the maximum rate a weighted average, too?

The Master: Objection sustained. Of course the maximum is not a weighted average.

Mr. O'Brien: He has said it is.

Mr. Ransom: Of course not. The maximum is the highest. 16395

Mr. O'Brien: I am talking about the 46.67, and not the average rate.

The Master: I know what you are talking about. The objection is sustained to the last question.

Mr. O'Brien: Well, we will get back to the same point. I will take the average rate.

Q. I will ask you now, how do you explain the apparent variation between the average rate in January, 1906, for gas production group of .1963, with

the rate in the Shop Department for the same period of .2211.

Mr. Ransom: I object to that question.

The Master: I will allow the witness to say why, if he can, the salaries are higher in the Shop Department than they were in the gas production department.

Mr. Ransom: It does not even appear that they were.

The Master: The average seems to be higher.

Mr. Ransom: Mr. O'Brien has not stated the

16397 average.

The Master: Yes, he did. What is the explanation of that?

The Witness: The average daily rate of pay was probably even a little bit higher at the plant than it was in the shop department, because many of the men in the plant were working on a twelve hour basis, and the shop department on a ten hour basis. However, the hourly rate is higher at the shop than it was at the works. The daily rate of wage is probably a little bit more at the plant than at the shop.

Q. Then those figures do not adequately represent

16398 the differences in labor, do they?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Q. Now, I will ask you, counsel drew your attention to the gas production cost, average rate in September, 1919, which is set out here on this Exhibit as .5189. I ask you how you explain the fact set forth here of an average for work at the holder stations of almost the same, .5053 for the same period, September, 1919.

The Master: Is there any explanation on that?

The Witness: I didn't get the question.

The Master: The average wage at the works was .5189, and the average at the holder stations was .5053.

The Witness: I have no explanation. There is none to make that I can see.

Q. Will you tell me what explanation you have for the fact that these figures indicate the average rate for the Mains & Service Department in September, 1919, to be .4697 as against .5189 for gas production?

The Master: I will sustain the objection on the ground that it is quite apparent that the wage 16400
cost is less in the Mains and Services than it is in the gas production. It means nothing.

Mr. O'Brien: Doesn't it show that these are absolutely worthless, this exhibit?

The Master: No.

Mr. O'Brien: What good is the average? It is up and down?

The Master: Yes.

Mr. O'Brien: The same reason that he gave for the difference—

The Master: This is all argumentative.

Mr. Ransom: All wages have not gone up in the same ratio. 16401

The Master: It is all argumentative from the paper itself. There is no sense in asking Mr. Woods to explain how he pays more for labor in one department than in another. He will say they have to pay more; that is all. You don't get anywhere with it.

Mr. O'Brien: I submit here that the witness ought to be so well acquainted with these variations of labor, and costs that he can say why they are reflected in that way, why in 1906 it cost more, so far as the hourly average is concerned,

to do the work out in the street, where you have simply caulkers, and laborers, and excavators under a foreman, why it costs more than they pay the technical and mechanical men who are actually making the gas and doing work in the shop in 1906, whereas, it is the reverse in 1919. Wouldn't you expect that the same thing would obtain in 1919?

The Master: Not necessarily.

Mr. Ransom: The different classes of labor have not gone up equally.

16403 The Master: I don't think it is useful, let us get to something else.

Q. Are there any superintendents included in these wages in the figures for holder stations?

A. No.

Q. What does that embrace, as a rule? Take sixty-three men in January, 1906?

A. That would be engineers, oilers, valve men—

Q. Just give me their names.

The Master: No.

Mr. O'Brien: I want a list of them, your Honor.

The Master: I won't have it. I will shorten

16404 this.

Mr. O'Brien: We may want to check them up.

The Master: I don't care whether you can check it up or not, I am not going to spend the rest of my life on the details of this. I will let him tell you what he included in it.

Mr. O'Brien: After we get through with this witness, if it becomes apparent to you that they have set up here to try to influence you these exhibits and they have thrown the die away so nobody can go back and check these figures up,

destroyed the trail, made it absolutely impossible unless you spend days and weeks, unless you reassemble the stuff they used to get up these figures, doesn't that go to the question of the good faith, the question of frank disclosure?

The Master: I don't know, but I have told you what I am going to do now.

Mr. Ransom: They are all shown in Exhibit 358 for identification?

The Master: That is on 358?

Mr. Ransom: Yes.

The Master: I don't think so. 16406

Mr. O'Brien: They have them all assembled together, the same as they put all their gas into one pot.

The Master (to the witness): Are you reading from 358?

The Witness: Yes, your Honor.

The Master: I will not permit you to do that.

Q. Are the workers there embraced in Exhibit 351 under the title, "Holder Stations" shown on Exhibit 358 as per each separate holder?

A. Each holder station?

Q. Yes.

A. Right. 16407

Q. And could an investigator go to the pay rolls of the several stations and find the groups of men that make up this total?

The Master: Objection sustained.

Q. 358 embraces every holder in the city, does it?

The Master: Consolidated Gas holders.

The Witness: Consolidated Gas Company holders.

Q. Does that include men who work on the holders at 99th Street and 21st Street?

A. No. These are the holder stations.

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The Master: You draw a distinction between the holder stations and the works?

The Witness: Yes.

Q. Are we to understand in this case that a holder station does not mean any holders where they make gas, but separate stations?

A. Not insofar as this tabulation is concerned. These are the holder stations which are isolated from the plants proper.

Q. Have you got separately set up there the number of men in the Kingsbridge Station?

16409 A. Yes.

Q. And 42nd Street?

Mr. Ransom: I object to that.

The Master: You can look at the paper yourself and see that, Mr. O'Brien.

Q. While you set forth on Exhibit 359 a slip showing the source of information opposite these several holder stations, 42nd Street, 63rd Street, 65th Street, 111th Street, 132nd Street and Kingsbridge, the term "Pay Roll Book" for a given year, do you mean that you did not have the time books for those years?

Mr. Ransom: Objected to.

The Master: Objection sustained.

16410

Adjourned to Wednesday, October 29, 1919, at 9:15 A. M.

Last Complainant's Exhibit 359.

Last Defendants' Exhibit MM.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 16411

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, October 29, 1919.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 16412
MR. O'BRIEN, of Counsel for defendant Swann.

Mr. Clark: I would like to note on the record that Colonel Hayward is actually engaged in the trial of a case in General Sessions.

GEORGE E. WOODS resumed the stand.

CROSS-EXAMINATION CONTINUED BY MR. O'BRIEN: 16413

Q. On Exhibit 351, Mr. Woods, you have attempted to give the range of hourly wage for the employees in the street and mains department?

Mr. Ransom: Objected to.

The Master: Objection sustained. He has already told us what Exhibit 351 covers. I am simply sustaining the objection for the purpose of saving time. It is clear on the record as to just what Exhibit 351 represents. You get nowhere by asking questions as to what it does not represent. It does not represent anything which is not

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included in his description of what it does represent.

Mr. O'Brien: Exception.

Q. Are there any street and mains department employees covered by the groupings in Exhibit 351, other than those you mentioned in connection with the shop department?

A. (Taking paper from Mr. Ransom.) I do not understand your question. You speak of the main department and then the shop department.

Mr. Ransom: I object to the question as in-
16415 definite.

The Master: There is no question.

Mr. O'Brien: I have asked a question.

The Master: The witness says he does not know what you mean.

Mr. O'Brien: I cannot give him the wherewith to know, your Honor. I asked him a question and I press him for an answer.

The Master: The answer is given. He says he does not understand your question.

Q. You have a grouping here, "Mains and Service Department"?

A. Right.

16416 Q. That does not cover any work in the street and main department of the company, does it?

A. That does not cover?

Q. Yes.

A. Yes, that covers the street and main department of the company.

Q. It covers work done in the repairs to mains?

A. Mains and services, yes.

Mr. Ransom: The mains and service department is the street department.

Mr. O'Brien: Perhaps the witness misunderstood some questions that I put to him yesterday.

Mr. Ransom: Maybe you misunderstood it.

Mr. O'Brien: I do not pose as being infallible, and I am always glad to say I do not know if I do not know.

Q. Have you gone over the cost of distribution of the complainant company for the last year?

A. I have.

Q. Do you have in mind now the cost of distribution as shown by the books of account of the complainant company for the year 1918?

A. I have.

Q. Was it not lower so far as the showing of the 16418
books went on a basis of cents per thousand cubic feet, in 1918, than any year back to 1913?

A. I did not look at 1913. I know what 1918 was and the eight months of 1919.

The Master: How did 1918 compare with 1917?

The Witness: I do not know as I looked at 1917, your Honor. I said I looked at 1918 and 1919. I should say they were higher, but I am not sure.

Q. What?

A. I should say it was higher.

Q. Higher in 1919 than in 1918? 16419

A. Yes, sir. I made an examination of 1918 and the eight months of 1919.

Q. If it be lower in 1918 than any year back to 1913, how do you explain this increase in your range of hourly wage?

Mr. Ransom: Objected to.

The Master: I will not take that. I can see a dozen different explanations. That means nothing. You may have had very much less work to do.

Mr. Ransom: They could not do work under the 1918 conditions.

The Master: You may have paid more per hour per man and still had much less work to do.

Mr. O'Brien: I am not going to deal with the speculations. I want to give the witness a chance to explain. If I have compressed too much into that question I will go back to simple questions.

The Master: I will not permit it because it is argumentative anyhow.

Q. Mr. Woods, have you brought here any data from which you may be able to answer questions with regard to actual costs?

16421 The Master: Of what?

Mr. O'Brien: Of mains and service department for the years covered by this exhibit, 1906 to date?

A. I have not.

Q. Have you brought it for any year?

Mr. Ransom: Does the question mean of that department separately?

Mr. O'Brien: Yes, I am coming to the others, too. I am going to clean that right up.

A. I do not know whether I have it separated into that department exactly or not.

Mr. O'Brien: I want to show your Honor be-

16422 fore we get through with these things here they are simply brought in to befuddle the case. They do not help you any at all.

The Master: That is why I would not spend much time on it, Mr. O'Brien.

Mr. Ransom: They show the great range of increase of wages.

The Master: Mr. O'Brien, I will agree with you that the range of wages is not particularly important except as being incidental to other matters to be considered. I can readily understand how a tabulation like this showing the range of

wages does not necessarily mean that they had as many men in 1918 or as much work to do in 1918 as in 1917, or 1914. It does not mean that they had as much repair work to do; it does not mean that it cost them as much to maintain that department or anything of that kind. It is simply one of the elements tending to show that it will cost them more to maintain that department if they need as much repair work now as they did last year or the year before, because the range of wages is going up. If they need as many men this year as last year it is going to cost them 16424
more, because the range has gone up.

Mr. Ransom: And over the years the range is the same. They may defer it for a particular year on account of the war conditions.

The Master: That is entirely true. What I am trying to make clear is that there is no useful purpose to be served in spending a great deal of time on this Exhibit No. 251.

Mr. O'Brien: I want to show your Honor it is positively misleading.

Mr. Ransom: It is not at all misleading.

Mr. O'Brien: I am not going to take your word for that. I am going to show it. 16425

The Master: It is only misleading if I permit myself to be misled.

Mr. O'Brien: Let me get it right down to the concrete, your Honor. If one is going over a compressed record of this case, without the detail that we have before us in the cross-examination, he is apt to assume that because the range of prices for every class of labor, as they are grouped here in this exhibit, shows a jump right on the face of things from one price to another, a percentage that you could get at as being quite

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an increase, the conclusion would be right away that there was a sweeping increase in the periods mentioned. What I want to bring home to your Honor in the questions asked this witness is that these figures are set up to deceive, and that as a matter of fact there was a decrease in the price of distribution, in the cost of distribution last year over many years that went before.

The Master: That may well be.

Mr. O'Brien: What the causes were will be developed.

16427 Mr. Ransom: You cannot show any such thing.

The Master: But I get your point, and the minute you say to me, "When you have this exhibit in mind, do not assume that it costs them more to maintain streets and main in 1918," I get your point at once. You do not have to spend a lot of time on cross-examination. It is a perfectly simple proposition. When you say to me now just because it costs them five, or ten, or twenty per cent more for the labor that they might need in that department—that does not at all prove that they needed it, or that the cost of maintaining that department was more.

16428 Mr. O'Brien: I know, but if this is not covered in cross-examination, and careful cross-examination, we will have presented to your Honor finding No. 66, proposed finding, that the cost of production, work, labor increased 74 per cent.

The Master: Well, I will not make any such finding.

Mr. O'Brien: From 1914 to 1919.

The Master: I will not make any such finding on that standing alone.

Mr. O'Brien: See Exhibit 351.

The Master: You have got to assume I am not a perfectly stupid person.

Mr. O'Brien: I am assuming you are a keen advocate.

The Master: I will not make any finding based on this exhibit.

Mr. Ransom: The complainant would not ask any such thing.

Mr. O'Brien: If I let Mr. Ransom conduct my cross-examination, we would not have the consumers over the threshold of the Court here.

The Master: In the light of what I have said to you, as to Exhibit 351, ask such questions as you still think are important; I will rule on them. 16430

(The last question and answer were read by the stenographer.)

The Witness: I have distribution costs here taken from the books for the year 1918 and for the eight months of 1919.

Q. Well, now, Mr. Woods, is the mains and service department coterminus with what you call distribution costs?

A. It is a part of the distribution costs.

The Master: Only it is not coterminus.

The Witness: No, it is only a part of the distribution costs.

Q. So that we could not make any comparisons by analyzing your distribution costs to determine whether or not these figures here correctly reflect all of the expense of the distribution—these figures under mains and services? 16431

A. It would not have any bearing on those figures at all.

Q. No. You have additional elements in distribution costs?

A. Those figures—

Q. From the elements of labor that are covered by this grouping in your mains and service department?

The Master: Oh, yes, Exhibit 351 does not purport to show the amount of money spent for labor in any period.

Mr. Ransom: Or the cost for distribution.

Mr. O'Brien: No, but it is to show a range of prices; it is here to show an extraordinary increase.

Mr. Ransom: In the cost of labor?

Mr. O'Brien: In the cost of labor.

The Master: And that only bears upon this, and that is the only connection in which I will
16433 consider it, and that is, how far I can go in a finding to the effect that the cost of labor has steadily gone up and apparently has reached a very high level and will or will not in my judgment remain at that level; or that the price of material has gone up, and matters of that kind.

Now, on a finding that the cost of labor necessary to be used in the maintenance of the mains and service department, that the average labor costs, so far as it is necessary to show them, have gone up, that is all it bears on. Now, that don't prove at all what it costs to maintain that mains and service department. They might spend a lot
16434 of money in 1915 and 1916 to put their mains and services in such shape that they won't need any very large expenditure for the next four or five years. That doesn't prove it.

Mr. Ransom: All this table indicates is what is the probable increase in the cost of doing the same quantity of work.

The Master: Haven't I said that?

Mr. O'Brien: That is what it has been built to show, but I want to show that it does not reflect the actual figures, that is all.

The Master: Well, it does not.

16435

Mr. O'Brien: I want to show that it did not go along with a continual rise from 1906.

The Master: Oh, that is different. If you can show that, then we will get something, if you can show that.

Mr. O'Brien: I am trying to ask the witness, your Honor, what he has brought in here to give us the actual figures.

Mr. Ransom: Well, ask him.

The Master: Next question.

Q. Have you brought here, Mr. Woods, any data that will enable you to tell us what were the actual costs of labor in the complainant company for the several years that are covered by this exhibit for any one of the groups that you have put upon this exhibit, gas production, repair labor and so on, down to the end?

16436

Mr. Ransom: I object to the question on the ground that Exhibit 352 which is already in evidence—

Mr. O'Brien: It has been rejected by his Honor.

Mr. Ransom: It has not been rejected by his Honor.

Mr. O'Brien: Well, you look over the record.

16437

Mr. Ransom: Exhibit 352.

Mr. O'Brien: The man doesn't know anything about costs, and he has not been called to testify to costs.

Mr. Ransom: Well, you are asking him about it.

Mr. O'Brien: Well, I am talking now about the prices of labor.

The Master: Let Judge Ransom place his objection on the record, and I will rule on it.

Mr. Ransom: I object on the ground that Ex-

hibit 352, which is already in evidence, shows in precise detailed form just the information now asked for by counsel.

The Master: Objection overruled.

Mr. O'Brien: I object again, your Honor, and protest here again at Mr. Ransom's engaging in the practice of handing papers to the witness.

The Master: Take it back.

Mr. Ransom: I submit to the Court that I have a right to furnish to the witness on the stand copies of exhibits, or exhibits, that are in this

16439 case.

The Master: The Master rules that counsel will not hand the witness anything, whether it is an exhibit or otherwise, unless the witness requests it.

Mr. Ransom: I except to your Honor's ruling.

The Master: You will have to take it back.

Mr. O'Brien: May I finish the protest I put upon the record, and which I made yesterday when Mr. Ransom during the course of a question put by me handed the witness some written paper to post him on the answer that he is to make.

16440 The Master: I have already ruled on it. Now, come on, next question.

Mr. O'Brien: Now, the last question that I gave, your Honor, I tried instead of asking fifteen questions about each group to compress it into one question, and that is called a speech.

(Question read by stenographer.)

The Witness: Gas making labor for the year 1918 was 1.84 cents.

The Master: The total amount paid.

Mr. O'Brien: I move to strike that out.

The Master: I will let it stand. The total amount paid, have you got that?

The Witness: I haven't got that in money, no.

Mr. O'Brien: I have asked him the fact as to what he brought here, your Honor, that can specify the grouping and the year.

Mr. Ransom: I ask permission of the Court to hand to the witness Exhibit 352, which sets forth both amounts, and in terms of cents per thousand cubic feet, of those different items.

The Master: I won't allow it at this particular minute.

The Witness: I don't understand the question. 16442

The Master: Next question. I don't either.

Mr. O'Brien: Your Honor, we have an exhibit here—

The Master: Ask the question again.

Q. Have you brought here any data that will enable you to tell me in your cross-examination what, from the books of the company, was the range of prices of labor in each year covered by this exhibit for the several groups that are set forth on Exhibit 351?

A. I have not.

Q. Have you got a memorandum of the pay rolls for the years set forth on Exhibit 351 for the various groupings contained thereon? 16443

A. I have not.

Q. Have you brought in a comparative statement?

Mr. Ransom: I desire to call your Honor's attention to the fact that by compelling me to withhold—

Q. Have you brought in here—

Mr. Ransom: I am making an objection.

The Master: Wait until the question is asked.

Q. Have you brought here any pay rolls of any of the departments for any of the years mentioned with

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the actual prices, the actual wages per day shown thereon for purposes of comparison?

Mr. Ransom: I desire to call the attention of the Court to the fact that by compelling me to withhold from the witness Exhibit 352 you are compelling the witness to state that he has not the data which has been asked for by the last three questions.

The Master: All right.

Mr. Ransom: Where the data is in court and has been in the hands of counsel and is in evi-

16445 dence.

The Master: All right. I am taking the witness's testimony.

Mr. O'Brien: I am talking, not about extracts from books showing the total amount paid in different years; I am asking now about pay rolls, your Honor.

The Master: Judge Ransom hasn't got the point that you shifted your line. Mr. O'Brien started on one thing and then when he found it was here, he shifted on to another thing altogether.

Q. Mr. Woods, have you covered in this Exhibit

16446 351 every class of employee whose work enters into the making and distribution of gas?

Mr. Ransom: Objection.

The Master: Objection sustained, already covered.

Mr. O'Brien: I note an exception to the ruling of the Court.

The Master: Read the question which was interrupted by Judge Ransom.

(Question read by the stenographer as follows): "Q. Have you brought here any pay rolls of any of the departments for any of the years

mentioned, with the actual prices, the actual wages, per day, shown thereon for purposes of comparison?"

A. I have not.

Q. Have you made any schedules that were taken directly from the pay rolls that will show the price of labor per day for each class of employee?

The Master: That objection will be sustained. The witness has testified that his figures were brought back to twelve hours and ten hours a day as the case may be, and in that way show the amount paid per day. Is that correct? 16448

The Witness: That is right.

Mr. Ransom: And Exhibit 358 summarizes them.

Q. Mr. Woods, have you ever employed in the later years of your connection with the company—do your duties permit you to go into the matter of employment of labor?

A. It does.

Q. I mean, do you attend to any detail? That is left to some subordinate, I assume, is it?

A. The actual employment?

Q. Yes.

A. Yes, that is left to some subordinate. 16449

Q. Well, is the question of wage taken up by you and investigated at all?

A. As to the rates of pay?

Q. Yes.

A. It is.

Q. Do you have to go into all that, or is that branch of the business side of the running of the gas plant left to somebody else?

A. Not the rates of pay, no. Any question as to the rates of pay, increases, etc., come under my jurisdiction.

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Q. Well, what particular man under you has that branch of work?

The Master: What branch?

Mr. O'Brien: The question of employment.

The Master: The actual employment?

Mr. O'Brien: The actual employment.

The Witness: The superintendents at the stations or the district superintendent would engage men as they needed them.

The Master: At prices fixed by you?

The Witness: At prices fixed by the company
16451 after conference by the executive officers.

The Master: And after notification from you?

The Witness: Yes, sir.

Q. Is it expected that your manifold duties go into those matters, too?

A. As to the rates of pay?

Q. Yes.

A. Absolutely.

Q. Well, do you also get that deeply into the business of the street and mains department?

A. The street and mains department would come under that. Questions of rates of pay always come together. It would not make any difference what de-
16452 partment it was under. There would be a general discussion as to what was necessary to do with that department and what effect any change in the rates of pay of that department would have on any other department, so that when those changes of any kind are made there is a general conference held as to what should be done and what effect it would have upon the company as a whole.

Q. Well, gas making is a business that is readily learned, isn't it?

A. Making of gas?

Q. Yes.

A. A gas maker?

Q. Yes.

A. Yes, a man can be trained to do the work.

Q. Most of the gas makers are men who pick it up in a practical way; they are not mechanics?

A. No, they are good, all-around men. You would not need to be a mechanic to be a gas maker.

Q. The gas makers are usually recruited from the laborers assisting the gas makers, are they not?

A. They are usually brought in from the boiler house and fire cleaning gang. They are promoted if they are good men.

Q. Husky men? 16454

A. Good, husky men, a man who has tended to his work, after learning to clean fires, et cetera, if he is the right kind of a man, you may make him a gas maker.

Q. The same would be said of the laborers in the boiler house, they graduate from the assistant's place to that of firemen and engineers?

A. That is right—well, he might not be an engineer. A man would have to pass an examination by the City of New York and get a license to become an engineer. He could become a boiler fireman, however, under the direction of an engineer.

Q. And outside the engine room, in the works, 16455 there are no what might be called skilled laborers, are there?

A. There are many skilled mechanics throughout the plant. We would have the skilled mechanics that you would have in any business.

Q. Take men like Barry, the gas maker at 99th Street; he has been with the company a good long time?

A. Yes.

Q. And most of the gas makers are old employees of the company?

A. We have a good many old employees, yes. I think that is a credit to the company.

The Master: Just answer the question.

Q. Isn't it true all over the country that employees of gas companies stick and remain in the employ, practically all their lives?

A. I cannot answer all over the country. We have a good many men that have been with us a good many years.

Q. I just want your general knowledge on the subject. Your men have never been unionized, have they?

16457 Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, this question was put by Judge Greenbaum in a case tried recently before him.

The Master: I don't care what question was put by Judge Greenbaum.

Mr. O'Brien: It is an important question.

The Master: I don't think so.

Mr. O'Brien: They might urge that they are affected by the present industrial conditions in the country.

The Master: They are.

16458 Mr. O'Brien: I want to show that if they are affected, it is only to a minor degree and to the same extent as other industrial institutions.

The Master: The Lord only knows as to how any institution is going to be affected by present labor conditions in this country.

Mr. O'Brien: But I want to show they are not affected to the same extent. I will take an exception to your Honor's ruling.

Q. Has there ever been an attempt made in the case of the Consolidated Gas Company collectively by the employees during the past ten years, to get an increase in wage?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Has there ever been a strike or a walkout on the part of the employees of the Consolidated Gas Company, or any of its affiliated companies selling gas to the complainant company?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Mr. O'Brien: Your Honor, I think this is a vital matter in connection with the labor question.

The Master: If I thought so I would allow it. 16460
I disagree with you.

Mr. O'Brien: Particularly where you speak about finding that there has been a level reached that will persist for some years.

The Master: I didn't say that.

Mr. O'Brien: Perhaps you did not say that positively, but you indicated it.

The Master: I said, if I find when all the evidence is in, if we have reached a normal level, though it was high, I was going to find that conditions were not abnormal, but that they were normal. That is what I said. I cannot do that until I hear all the evidence. As the evidence 16461
now stands, if I had nothing else, I should so find.

Mr. O'Brien: After all, if we are going to assume in this case that there is unrest at the present time, isn't it proper to find out just how far conditions that obtain in other industrial institutions, obtain in the complainant's company, so far as that is concerned?

The Master: No, this man may not know the first thing about it.

Mr. O'Brien: Exception.

The Master: There may be a feeling of unrest among the gas makers, the firemen and laborers that may not have reached the company yet; it may be brewing; it may not be on the surface; they may not know anything about it.

Mr. O'Brien: This man says he is employing labor, and I want to find out if he is in touch with it.

The Master: I will sustain the objection.

Mr. O'Brien: Exception.

Q. Mr. Woods, have you got an employment bu-
16463 reau in the main office, or head of an employment bureau to supervise employment, the selection of employees, investigation into their antecedents and references, or is that left to the superintendents of the several stations and works?

A. We have no employment agency at the general office. Every man that is employed is reported to the general office, his employment, name and nationality—

The Court: You are wasting several seconds there. The question is, who does the employment, the general employment bureau or the station superintendents at the works.

The Witness: The station superintendents.

16464 Q. Is there anybody in the company that is charged generally with the responsibility of keeping in touch with costs of labor?

Mr. Ransom: Objected to.

The Master: Objection sustained. The witness has said he is.

Mr. O'Brien: Exception.

Q. Do you keep yourself in touch generally with the costs of labor over several years?

Mr. Ransom: Objected to as fully covered.

The Master: I will allow it.

A. I do.

Q. Are you able to state anything about the condition in the labor market in each year in the last decade?

The Master: Objection sustained.

Q. Is it not a fact that in 1913 and 1914 there was a great surplus of labor?

The Master: It will be so conceded by counsel for the complainant, that in 1913 and the early part of 1914, there was an over supply of labor. Isn't that so, Judge Ransom?

Mr. Ransom: I have no doubt there was.

Mr. O'Brien: I don't want his concession. 16466

The Master: It is a fact as to which I could take judicial notice.

Mr. Ransom: But this witness has not taken judicial notice of it, so far as his range of prices go.

The Master: I don't care whether he has or not, but when I look at that exhibit, I have it in mind.

Mr. O'Brien: I know, but the photograph of your mental machinery is not going into this record.

The Master: That is why I have a concession on the record from counsel for the complainant 16467 that that was the fact. You need not prove it.

Q. Are you able to say what turnover you had each year?

The Master: What do you mean by turnover?

Mr. O'Brien: The number of employees going out each year.

Mr. Ransom: You mean in percentage?

Mr. O'Brien: The witness knows what I mean: let him answer.

A. Yes.

Q. What is it?

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A. I do not recall the exact figures. I have a record of it at the office. In some of our departments the turnover has been as high as 200 per cent in a year.

Q. You could not say what departments they are and what years?

A. No, but in 1917 and 1918 the turnover was extremely high.

The Master: In what department?

The Witness: In all departments.

The Master: What particular department?

The Witness: In the manufacturing depart-
16469 ment particularly the turnover was very high.

The Master: Due to what?

The Witness: Simply men roving around from one place to another, looking for jobs. They were a sort of itinerary crowd who would try a job here for a few days, and then would hear that somebody else would give them ten cents or a quarter a day more, and they went somewhere else. We would have men coming in and staying three or four or five days, and it was a constant effort on our part to keep men. When I say one hundred or two hundred per cent turnover, that does not mean that all our men left, but there was
16470 a certain crowd that was in and out all the time.

Q. You have not specified the particular branch of the work where that high percentage obtained for the year?

A. I say in 1917 and 1918 our turnover was very heavy.

The Master: Which particular department was heaviest?

The Witness: In the labor department it was extremely high.

Q. That would come down to the handling of materials?

A. The fire cleaners, firemen and floormen were in and out all the while.

The Master: Coal handlers?

The Witness: Coal handlers.

The Master: Coal passers?

The Witness: Coal passers, general boiler firemen. We all know the dissatisfied condition of labor at that time, and they were simply going from place to place for the purpose of getting some work?

Q. Were you not swamped with applications in other years? 16472

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Was there any decrease in labor in 1913 and 1914 as against other years in any branch?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Was there any decrease in the wage in 1913 and 1914 as against the earlier period?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I can't see why that was objectionable. We haven't any testimony on that as yet. 16473

The Master: I think we have had enough upon this question of wage.

Mr. O'Brien: Wouldn't it be better to simply just rule this out and let it go into the scrap heap at once, this Exhibit 351?

The Master: No.

Mr. O'Brien: Your Honor knows the situation, and the Court above may be misled by it.

The Master: I will try to see that the Court is not misled. I will try to put my views in such

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shape as to express what I did consider, and what it is based on.

Q. Will the time books of the companies and the pay rolls indicate the changes in labor from year to year and month to month?

A. No—they would indicate different names on the pay rolls.

Q. That would give some idea of the turnover?

A. To some extent, yes.

Q. They would be a reliable index you think of the turnover?

16475 A. The turnover could be ascertained from the pay rolls.

Q. Are any of the men paid by number, by badge, is their identity lost in that way?

A. No, they would have a name and a number.

The Master: How is the turnover important?

Mr. O'Brien: Well, it is taken by some to indicate the demand for labor or the surplus of labor, the way the men stay on the job.

The Master: Mr. O'Brien, I think we have gotten away from the point of figuring the value of labor by supply and demand. I think those days have passed. I don't think that the American

16476 people are any longer impressed with the idea that because there are a lot of people out of a job that the employers of labor should squeeze those men down to a low wage. We have gotten to the point of a living wage basis, and I doubt very much whether any court in the land is going to consider the possibility of an over supply of labor to the point that instead of allowing a man two or three dollars a day, which is considered a possible living wage for an ordinary laborer, that the Consolidated Gas Company, because of the over supply and the lack of

demand should say to this man, "We are only going to give you seventy-five cents or one dollar, or one dollar and a quarter." At any rate, I will not hold any such thing.

Mr. O'Brien: Well, a great many conditions are going to affect that situation.

The Master: Not the question of supply and demand to any great degree.

Mr. O'Brien: Wait until immigration sets in, that will have some effect.

The Master: Employers of labor in my judgment are going to hesitate a long while before 16478
they will squeeze a laboring man down to a wage less than a man in that condition of life can decently live on without going out to steal or rob.

Mr. O'Brien: But your Honor has again misunderstood me. You take a question and construe it in your own way and proceed to make a ruling on that. I am not dealing with the future. Here is a man that comes in here and sets up an exhibit. I persistently have asserted that it is meant to deceive the Court. Now, I am asking questions here not about the future, I haven't even spoken about today. My ques- 16479
tions are directed towards the past. The question of the turnover is one of the indices by which you may judge the trend of the prices of labor at a given period. It may be up or down. Counsel has attempted in this exhibit here to give us something that will reflect a crescendo right along. We saw some things yesterday that prove right out of the figures that they are wrong.

The Master: Next question. I asked you what your purpose was, and what I said was in answer to what you said your purpose was.

Mr. O'Brien: I have not entered into this guest chamber yet, if your Honor please, as to whether we have reached a plateau which is never going to descend down to the former basis. I am not going to be misled either by this man of straw, hypothetical prices, to get us away from the actual prices.

The Master: I will not either.

Mr. O'Brien: This is the greatest bluff I ever heard of.

Mr. Ransom: There is nothing hypothetical
16481 about it.

Mr. O'Brien: Throw out a bone to get us chewing up the hypothetical prices so we will get away from the actual prices. These are a joke.

The Master: Let us have the next question.

Q. What do you mean by manufacturing stations in this grouping here on Exhibit 351?

A. That is simply a recapitulation of what is on the other sheet.

Q. You have got a recapitulation on the other sheet.

A. Yes. Well, it is all on the one sheet there.
16482 That is one exhibit. The other is all on the one sheet.

Q. You have notes at the bottom indicating to the Court that that is the end of that story on the first sheet.

The Master: I do not think the witness understood the question.

By the Master:

Q. Mr. Woods, on the first sheet here you referred to gas production?

A. Yes.

Q. Repair labor, handling material, miscellaneous labor?

A. Yes.

Q. And a recapitulation of those?

A. Yes.

Q. On the next sheet you refer to manufacturing stations, holder stations, mains and service, shop, and then a recapitulation of that?

A. No.

Q. You say that manufacturing stations, being the first subdivision of the second sheet, is practically a duplication of the recapitulation on the first sheet?

A. Right.

Q. What was the purpose of subdividing that in- 16484
to the next sheet as manufacturing stations?

A. Just to put it all on the one sheet; having it all on the one sheet in the second exhibit, that is all. There is no real reason for it.

Mr. Ransom: The first sheet shows manufacturing stations and the second sheet starts, "By summary."

By Mr. O'Brien:

Q. Mr. Woods, you say that this second sheet was meant to follow right after the first and the grouping entitled "Manufacturing Stations," is exactly the same as the last grouping on the first page, "Recapitulation of all hourly employees (including fore- 16485
men)"?

A. It should be, yes.

Q. Does it include foremen?

A. If the foremen are on the pay roll, yes. Those foremen are on the pay roll.

The Master: An examination of it indicates, Mr. O'Brien, that precisely the same figures are included in the first subdivision of the first page as in the recapitulation.

Q. Why was it repeated on the next page with the omission of the words "Including foremen"?

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A. Well, no reason, but of course if those foremen were on the pay rolls it was put in. There was no ulterior motive about it in any way, Mr. O'Brien.

Q. Was it simply an accident that the words "Including foremen" were omitted?

A. No, because there were foremen included there and it was put on.

The Master: The Master states that he understands what undoubtedly happened. The witness had prepared on the first page a schedule showing various groupings, making up the manu-
16487 facturing stations. Then when he took the next page he simply headed it, "Manufacturing stations," including everything that was on the first page in those manufacturing stations.

The Witness: Right, your Honor.

Mr. O'Brien: I am going to show you that they put in a lot of figures to deceive you. I will convert you after a while.

The Master: They will not deceive me as easily as that.

Mr. O'Brien: The thing to do is to send it where Exhibit 352 was put by your Honor.

The Master: Maybe I will before I get
16488 through.

Mr. O'Brien: We are taking three or four days of my time and your time because they want to put it in the case. Your Honor is continuously talking about the losing of time, and this thing is wasting time and ought not to be here.

Q. Mr. Woods, the range of prices for labor in these several groups in every case indicates an increase from 1906 down to date. Are we to assume from that that in every branch of employment that was the case with your employees?

A. Absolutely, sir.

By the Master:

Q. A constant increase?

A. Absolutely.

Q. Let me ask you just in this connection—I ruled out the question before and I think it might fit in here—does that include the years 1913 and 1914? Did labor prices recede during that period?

A. They did not, your Honor.

The Master: I ruled that out before, Mr. O'Brien, and I thought I would leave it in in connection with your last question. The witness constantly says the prices have risen from 16490
1906 to date, and that is true in 1914, when the labor conditions were very bad.

The Witness: That is right.

Q. That is, bad for the laboring people?

A. There was no recession in prices.

By Mr. O'Brien:

Q. Mr. Woods, have any classes of employees in other years run through over twelve hours, sixteen hours, eighteen hours, at a time?

The Master: Mr. Edgerton indicates that is not what he wanted you to ask.

Mr. O'Brien: Mr. Edgerton did not speak about that, your Honor. 16491

The Master: Then I will say it is not what you wanted to ask?

Q. Prior to 1918 have you had any arrangement for the payment of overtime?

A. Prior to 1918?

Q. Yes.

A. Yes.

Q. What was the arrangement where any workers would run through or over their shift into another?

A. At just what time we went into the time and a half I do not recall. We used to pay straight time.

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Q. Have you got an arrangement now for time and a half?

A. We have.

Q. You do not know when it came into vogue?

A. I think time and a half came into vogue in the Manufacturing Department sometime in 1917, in the Street Department and Shop Department it has been in existence for a much longer period of time.

Q. Prior to that, whenever it came into vogue, the arrangement you think was straight time?

A. Straight time. We continued that as long as
16493 we could, until we could not get men to work overtime without paying them an additional wage for it, and we got into that when we had to.

Q. The time books would show that, where they ran into another shift?

A. Yes.

Q. Did they show it?

A. They will show it, yes.

Q. What do you do in your Street Department with employees during the weather when you were not laying mains, the winter weather?

A. If we had not any work for them we laid them off.

16494 Q. Do you take care of them in some other way, with other employment?

A. If we have other employment we keep them all employed.

Q. What has been the practice? Is there an entire drop in the Street Department during the winter months?

A. No, because we have not been doing a great deal. During the winter months there is a great deal of repair work, leaks and so forth, from frozen ground, and we can keep busily employed up to that time and then the men are quite largely engaged in

repairing leaks and so forth, as the frost gets into the ground.

Q. Then you are extending mains, of course, and you will put on a large number of men?

A. Yes, that would be—

Q. If there is a marked increase in the Street and Main Department, in the number of employees, it is generally caused by the extension of mains?

A. That would be a construction account, it would not be an operating account at all.

Q. I asked you if that was not the fact?

A. If there was any great extension. We would 16496
also use some of our own men at times in extending mains or laying mains.

Q. And the wages, of course, for that kind of labor would be chargeable to capital account and not to operating expenses?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. What arrangement is made as to the allocation of the wages of that kind of employment?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do the work tickets indicate whether or not 16497
the work is an operating expense or chargeable to capital account?

A. They would.

Q. Are different colored tickets used?

A. The time books would show. That would be indicated on the time books, as to what class of work the man was on.

Q. When you got up this range of prices, did you get down to work tickets at all?

A. No.

Q. This range of prices shown on Exhibit 355, and

16498 George E. Woods, Cross.

the classes of labor included in the groupings there, is there any work that is chargeable to capital account?

A. No, all those men there were on operation.

Q. Every one of them?

A. Yes.

Q. You take it back in 1906, Mr. Woods, and later years, up through the following seven or eight years, a man who worked two shifts would be classified on the pay roll that day as one man, would he not?

Mr. Ransom: Objected to.

16499 The Master: Objection sustained.

Q. Was he classed on the pay roll as one man at that time?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

The Master: Where is your estimate as to the cost of making water gas, Mr. Ransom?

Mr. Ransom: I think it is there. It is somewhat below the present actual cost, but actual as of the time it was made.

The Master: It costs somewhat less to make water gas than coal gas—that is, excluding all

16500 of this repair labor and repair material and other expenses?

The Witness: To make water gas than coal gas?

The Master: Yes.

The Witness: Under the present prices of bituminous coal and the prices we were receiving for residuals, your Honor, yes, it costs less to make water gas than coal gas. For the year 1918 that did not apply, because we were getting some high prices as the result of the war for some of our residuals; but since that time the

16501

prices for residuals have gone down, and the price of bituminous coal has gone up; and bituminous coal, every dollar a ton represents ten cents a thousand in the cost of production.

Mr. O'Brien: I move to strike out the question and answer; it is too general.

The Master: Objection overruled.

Mr. O'Brien: You asked the witness for a general statement.

The Master: I am taking it for what it is worth.

16502

Mr. O'Brien: I thought it was off the record.

The Master: No, it is on the record.

Mr. O'Brien: You did not make it clear whether you asked him about the hypothetical prices he has got, or the actual prices.

The Master: This witness has testified as to certain items which go into the making of water gas and coal gas.

Mr. O'Brien: Your Honor, let me say this to you right here. The actual fact is that it costs less to make coal gas than it does water gas.

16503

Mr. Ransom: In some years.

The Master: The witness says it costs more. His testimony is worth what it is worth. That is all.

Mr. O'Brien: Are we going to come into court here and take a witness dealing with coal and oil and other things that make gas, and omit to ask him the direct question, but saying, "What do you think it ought to cost?" It is a ridiculous proposition to put in a rate case.

The Master: I was figuring up the items given by this witness necessarily and actually

going into the making of coal gas, and according to my figures it showed that it cost 41.82 cents to make coal gas and 38.56 to make water gas, excluding items not going actually into the gas making.

Mr. O'Brien: That is something he has got to explain to you, your Honor.

The Master: That is what I expect you to have cross-examination for.

Mr. O'Brien: That is what I am going into this morning. You are anticipating it. Of
16505 course, you have got to bear in mind, too, when you get into the question of residuals, they have something on which they have a monopoly.

The Master: Certainly.

Mr. O'Brien: They can put the price up and put it down.

The Master: I understand that.

Mr. O'Brien: They can promote it or squelch it. I have a janitress who went over there trying to get coke, coke, coke, and they said, no, she could not have any coke. They have promoters around. A man came in since we began to try this case, or just about the time we began
16506 it, who asked me to buy some coke; and also they sent out postcards with a big figure on it of so much per ton.

Mr. Ransom: At times the City Administration has asked that this company sell coke. Under ordinary conditions it is not able to sell it.

Mr. O'Brien: You have a monopoly on the lighting situation, and the complainant controls the Edison Electric Company and controls the gas feature of it. Then they have something in the coke end of it, and they can, for one reason or another, promote it or keep it back. Here

where they are using it they try to put a big price on it, and where they try to sell it it is a different proposition.

Q. Mr. Woods, in preparing the hypothetical figures on Exhibits 353 and 354 for identification, did you have before you the costs of making gas in the complainant company and all the allied companies?

A. I knew the cost and knew their operation; knew the coal and oil that they were using, the prices of material which obtain at the present time, and based upon—

Q. Just a minute, now, and answer my question 16508
yes or no as we go along, because I will move in each instance to strike out your answer and we will not progress. Did you when you sat down to make up these figures have before you the details of the cost of making water gas and coal gas of the complainant company and its affiliated companies for any particular period or any periods?

A. I did not have it before me. I knew the cost of the various companies.

Mr. O'Brien: I move to strike out the last part of the answer, your Honor.

The Master: I will let it stand.

Q. You say you knew the figures? 16509

A. I did. I knew their operating results.

Q. Did you have the details of fractions of cents in your mind when you made these up?

A. I did not, and did not need them—did not need any.

Q. Did you have before you the costs of making gas expressed in cents per thousand cubic feet for the various items and subitems set forth in these hypothetical schedules of companies other than the complainant and its allied companies?

A. I did not need any of the figures.

Q. I asked you if you had it before you?

A. I did not.

Q. Do you know what the costs have been at any particular time, or at any period since 1906, of any other companies than the complainant and the allied companies?

A. I know those figures that are published by the Public Service Commission of the various companies throughout the city.

Q. Did you have them before you when you made up these hypothetical figures?

16511 A. I did not.

Q. Have you made any investigation in the last thirteen years, or study, of the prices from time to time and the costs from time to time, of making gas in the Brooklyn Union Gas Company?

A. I have.

Q. At what particular time?

A. Every year.

Q. Every year?

A. Every year.

Q. Have you any memory as to how they run from year to year?

A. Why, I cannot recall at the moment, but I have

16512 testified before that every year I have made comparisons with the engineer of manufacture of the Brooklyn Union Gas Company as to what they were doing and how they were doing it, and I also analyzed the reports that came from the Public Service Commission of the various gas companies.

Q. Now, you need not rattle that off, Mr. Woods.

Mr. Ransom: I object to the comments of counsel.

The Master: I will do the scolding; you go on and ask the questions.

Mr. O'Brien: I want an answer, not some-

thing that has been prepared—no hothouse stuff on this record.

Mr. Ransom: I object to the comments of counsel. I am addressing the Court. I object to the attitude of counsel for the defendant Edward Swann, and his persistent and unwarranted comments about this witness, and his general physical attitude of intimidation.

The Master: Next question.

Q. Mr. Woods, have you made such an analysis of the cost of making gas of the Kings County Gas Company in the last thirteen years as would enable 16514
you to tell us approximately what it cost them and the various items of the cost, so that you could make some comparisons with such costs and the hypothetical figures you set up here on Exhibits 353 and 354?

A. Only such figures as I have seen in the Public Service Commission reports.

Q. Have you them in mind now?

A. I have not them in mind at the moment.

Q. Did you at the time you sat down to make up such an analysis and study of these Exhibits 353 and 354 have before you the various costs of the several companies? 16515

A. I had in mind the operation of the Consolidated Gas Company and its allied companies, and based upon what I knew as to our operations, on that I made up these figures. I have testified to that three or four or half a dozen times.

Mr. O'Brien: I move to strike it out as not responsive.

The Master: I will not strike it out, but I will again call the witness's attention to the fact that he must answer the question and nothing more.

16516 George E. Woods, Cross.

Mr. O'Brien: I press the question again, and ask him whether when he started to prepare the hypothetical figures, he had before him the various costs of these various companies.

The Master: Other than the allies?

Mr. O'Brien: Yes.

Mr. Ransom: I object to the question on the ground it assumes these figures are hypothetical, and the witness has not said they are hypothetical.

The Master: I do not care what counsel calls
16517 them. Did you base these figures on the operations of other companies than the Consolidated and allied companies, or upon Consolidated and allied companies?

The Witness: I did not. I based them, your Honor, upon my own experience in connection with the Consolidated and its allied companies, and the experience I have had for this number of years in the operations under which we were operating.

The Master: Next question.

Q. Did you have before you when you made up these figures, the cost of making gas separated into
16518 the several items that you have set up in these hypothetical figures for—

The Master: Leave out the word hypothetical, it simply takes up time. In these figures shown on—

Q. Shown on Exhibit 353 and 354 for identification, of the Central Union Gas Company? Answer that yes or no.

A. No.

Q. Did you have before you when you were making the calculations as to these figures the costs of making gas separated into the several items set forth

in these Exhibits 353 and 354, of the Astoria Company?

A. I probably knew what the Astoria figures were at that time, yes.

Q. Well, do you mean that you carried them in your head for the various items here, like coal gas, bituminous, boiler coal, labor handling, residuals—

The Master: That is enough.

Q. Coke and breeze for sale—

The Master: That is enough.

A. I had access to the Astoria figures.

The Master: Did you have them in your mind? 16520

The Witness: I did.

Mr. Ransom: That was not the question. He asked if he had them physically before him.

Q. Well, I will ask him both questions. Did you have them physically before you when you made up this schedule?

A. I do not recall. I may have had some figures at that time.

Q. You do not recall that?

The Master: That is what he said. Next question.

Q. How long ago—when did you make these up?

A. I don't know. A month ago. 16521

Q. Was it a month or two months?

A. I do not remember. A month or six weeks. I cannot recall. If I knew the date, I would tell you, Mr. O'Brien.

Q. Was it farther back than two months ago?

A. I should think not, no.

Q. Well, when you speak about having before you your experience, do you mean you carried these items, cost items, in your head?

A. A good many things I carry in my head: I do not carry everything, no.

16522 George E. Woods, Cross.

Q. Well, for instance, if I asked you for the real —what is the cyanogen figure in coal gas in cents per thousand cubic feet, would you run that off?

A. No. That varies from time to time. Cyanogen will run from 75 to 80 grains per hundred cubic feet, up to 120 or 125 grains, depending upon the character of the coal and the condition of your heats.

Q. I am talking about cents per thousand cubic feet. Now, could you give us that offhand or not?

A. I could not, no.

Q. You could not?

16523 A. No.

Mr. O'Brien: You see, your Honor—

The Master: Don't comment.

Q. If one were to say, "Mr. Woods"—say at a convention of the gas makers or gas engineers, "How high does your repair labor figure during the war period in cents per thousand cubic feet," would you give them a figure?

A. I probably would, yes.

Q. What would it be?

A. Coal or water gas?

Q. Coal gas?

A. I would say about six cents per thousand.

16524 Q. Six cents?

A. Yes.

The Master: Why is the repair labor higher for coal gas than for water gas?

The Witness: Because it is a different—the units in the manufacture of gas are so much smaller per unit, your Honor, and the method and the character of the apparatus and machines we use in connection with that requires very much more.

The Master: Nearly four times as much?

The Witness: Yes.

Q. Well, now, Mr. Woods, in making these figures out that are on these two exhibits, did you have before you and did you give any weight to the costs in other cities of coal water gas?

Mr. Ransom: I object to that.

The Master: Objection sustained on the ground this witness has testified fully that he did not have in mind any operating results of plants other than the Consolidated and its allied companies. That excludes other cities.

Q. Did you before you made up these figures and determined upon these several items in Exhibits 353 16526
and 354, make any comparisons between the costs of Central Union Company and at Astoria?

A. No, I do not think I did. I probably—

The Master: That is an answer.

Q. Did you run back over a range of years in the costs of the complainant company for those several items from year to year when you made these up?

A. I knew what the costs were from year to year. I knew they were advancing very rapidly.

Q. You say you carried them in your head?

A. No, but I knew they had been lower than was indicated there, which, to my mind, had no bearing upon the present conditions of affairs. I was basing 16527
this upon the conditions as of today.

The Master. You don't want to pay any attention to what went back?

The Witness: What is happening in 1913 and 1914 as to the condition of labor and material had no bearing as to the cost of gas as of today.

Q. Who did the computations for you for this exhibit?

A. I did them.

Q. You say you did not have to have the previous costs of other years?

16528 George E. Woods, Cross.

A. Absolutely not. As a matter—

The Master: That is enough.

Q. Did you have before you the costs as to other years of the Central Union Gas Company and Astoria?

A. I did not.

Q. Did you carry them in your head?

A. No.

Q. These are all expressed here in fractions of cents, decimally, are they not, on these two exhibits?

A. Some of them are, yes.

16529 Q. Well, you don't intend to convey to the Master's mind that you carry in your head, so that you were able to set down these figures, carried out into four decimal points, the various items?

The Master: If he did, I would not believe him. Now, get down to how they made this up, will you?

Q. So that when you started in to figure these out—

The Master: You had something before you?

The Witness: I did. I testified, your Honor, in relation to coal gas that I had the Astoria figures in mind. I used some of the figures from

16530 the reports that I had in connection with the Astoria operations.

The Master: Get down to just what he did when he made his figures, where he got his figures from, how he got them, and bring out any point that bears upon the reliability of them.

Q. As to coal gas costs, how did you figure out 200 pounds of bituminous coal?

The Master: That is what I want to get.

Q. As necessary to make a thousand cubic feet of coal gas.

The Master: That is the kind of testimony that I am anxious to get. That will help me.

A. Five cubic feet to the pound.

Q. What?

A. Based upon a production of five cubic feet to the pound of coal.

Q. Where did you—upon what did you base that estimate?

A. Because I know an average condition, average operating condition of five cubic feet is a good operating condition. I testified to that. You can get from—

The Master: Now, that is an answer. Just answer the question. 16532

Q. Is that borne out in the actual experience of any company that you know of?

A. It is.

Q. What companies?

A. We have got more and less.

The Master: What companies?

The Witness: The Central Union have gotten that; the Astoria Light, Heat & Power have gotten it.

A. At what times?

A. Various times.

Q. Can you tell me any month or any year where that is indicated? 16533

A. Oh, there have been many days and many months that they have done somewhat better than that, and sometimes less.

Q. I have asked you a question now. Please answer the question I asked.

A. I don't know.

Q. Can you recall any month? A. I do not recall any month, no. I said there have been many months.

Q. Is there any record of the company to which we might refer to get the actual pounds?

The Master: Figures?

The Witness: Yes.

Q. What book?

A. Why, you can get it in the monthly record of operations.

By the Master:

Q. Don't the manufacturing record show it?

A. Or you might get it in the manufacturing record.

Q. Doesn't that show how much coal is used per run?

A. It does not.

Q. How much gas is made per run?

16535 A. There might be per pound, your Honor, per ton, both ways.

Q. Doesn't the manufacturing record show how much coal and other material is used during a run, during which a certain amount of gas is made?

A. No.

Q. Isn't there any way of checking up that way?

A. Per run?

Q. Yes.

A. No.

Q. Per day?

A. Per day, there would be the amount made, but that is subject to calculation, which we never do. That

16536 is, you can get the amount of coal used and the number of runs made, which would not mean anything to a gas engineer's mind, your Honor, because the operator might change the cycle of his run, if conditions were not right. They might run an eight minute run and blow and follow with a run of nine minutes, and there might be a seven minute run, and to convert pounds of coal per run of the machine would not mean anything unless you knew the cycle of operation.

Q. Would it mean anything if you took the total

make per day and the amount of material used per day?

A. As to the runs?

Q. No, as to the amount of coal necessary to make a thousand feet of gas?

A. Oh, yes, you will have that figure.

Q. Well, doesn't that show in the manufacturing record?

A. It would show.

Q. There cannot be any wide variance in calculating that from the books, can there?

A. No, that will vary with the quality of coal you 16538
have, which is not the same every day.

Q. I mean there ought not to be any dispute as to the amounts of gas made during a particular period of a day or a week, and the amount of material that went into making it, is there?

A. There is not, your Honor.

By Mr. O'Brien:

Q. Did you take an average for this 200 of a particular period?

A. No, I based that on what would be an average operating condition with a good grade of coal, which would produce five cubic feet to the pound.

Q. Do you know what an average was for any 16539
particular period now of the Astoria Company?

A. We have made five feet to the pound, we have made 4.85 and 4.80.

Q. I asked you did you know for any particular period the average of the company, the Astoria Company?

A. The Astoria Company?

Mr. O'Brien: You must direct him again, your Honor, to answer my question and we will get along with the witness, if he will answer.

The Master: I will try to get your answers, if you will stop yelling.

A. The average during the year 1918 was 208.15 instead of 200 pounds.

Q. How much?

A. 208.15 for the twelve months, 1918.

Q. You brought some memorandums that you could refresh your memory on that?

A. Yes, I have a memorandum here that shows what that is.

Q. Why did you make a difference of eight pounds
16541 in that hypothetical figure?

A. Because I assumed 200 pounds was a good operating condition. It was a little bit better than we had at Astoria in 1918—208, and I made a figure of 200 pounds instead of 208. That will vary, depending upon the quality of the coal, etc.

Q. In the boiler house, boiler coal item of ten pounds?

A. Ten pounds, yes.

Q. Does that represent an average of any company that you know of?

A. No, that ten pounds is indicated—

Q. Just answer my question yes or no.

16542 The Master: He has answered it. Go ahead.

Q. What has been the average for any year of coal used per thousand cubic feet of gas, boiler coal at the Central Union Company?

A. It will be fifteen to sixteen or seventeen pounds.

Mr. O'Brien: Your Honor, I am going to ask for a definite answer. "It would be." I am asking for facts.

The Witness: I haven't the Central Union figures before me.

Q. I am asking for facts.

The Master: He has given the answer, he hasn't got the Central Union figures before him.

The Witness: I want to explain about the ten pounds.

Mr. O'Brien: I object to that now.

The Master: Don't explain anything, just answer the questions. The explanations will come sooner or later. Come on now, state the average.

Q. Are you able to state—

The Master: Can you state the average of the Central Union for any particular period? 16544

The Witness: I cannot state the average for any particular period. I cannot recall it from memory.

The Master: Next question.

Mr. Ransom: Hasn't the witness the right to look at any memorandum he has?

The Master: He hasn't any memorandum about the Central Union.

The Witness: I haven't the Central Union memorandum here.

The Master: Next question.

Q. Assuming the quality of coal is the same, the pounds used would be the same in any coal gas plant 16545 in the country, wouldn't it?

A. Not necessarily.

The Master: You have got to assume operating conditions besides?

The Witness: Absolutely.

Q. Well, in the gas making industry and science they usually allot a certain number of pounds, don't they, to the making of coal gas?

A. They do.

Q. Under even conditions?

A. You have got to know the even conditions.

By the Master:

Q. Have you got any memorandum, Mr. Woods, showing what the average was during 1918, for boiler coal over in Astoria?

A. 1918?

Q. Yes.

A. I have, your Honor.

Q. What is it? Have you the 1918 actual operating figures for the Astoria plant on boiler coal?

A. 16.43 pounds. There was 7.2 pounds of coal, and 9.23 pounds of coke and breeze.

16547 Q. That is the equivalent of what in coal?

A. We didn't use any tar in that at all, this is all solid fuel. It is 16.43 pounds of coal.

Q. That is in excess of the ten pounds you figured on?

A. It is in excess of the ten pounds. That is what I figured we would have to purchase. I figured there would be about six pounds of breeze that I did not allow any credit for, which would be used in the production of coal gas, and we would have to buy ten pounds of fuel.

Q. Where did you get these figures from?

16548 A. I got those from the engineering record, the actual figures in 1918.

Q. Of the Astoria Company?

A. Yes, the Astoria Company.

Q. Where are those records?

A. In my office.

Q. Your own department records?

A. My own department records, insofar as the quantity is concerned, yes.

By Mr. O'Brien:

Q. Who made them up?

A. I made them up.

16549

Q. You made the figures up that you have before you from the engineering records.

A. No, not all of them; some are from the accounting records.

Q. Have you gone over the Astoria Company's report to the Public Service Commission last year?

A. I have not.

Q. Do you know what is contained in it?

A. Generally speaking, yes.

Q. Do you know the prices that are there contained?

16550

A. I should imagine I would know the prices, yes; I have seen the prices.

Q. And the quantities that are set forth there?

A. Yes, I have seen the quantities that are there.

Q. How do you explain, or where did you get the figure of $5.90 a gross ton for your bituminous coal?

A. At the price coal is being purchased as of today.

The Master: Where did you get the figure from?

The Witness: I got it from the purchasing department and our books. The contract prices are for about $5.90, and we are buying some coal in the market at $6.50 a ton.

16551

Mr. O'Brien: Your Honor, is it your position that we are not going to take this testimony here as to the prices?

The Master: I do not take his testimony as to prices. What I take his testimony for principally is this: As he has just testified, it takes 200 pounds of coal to do this, it takes ten pounds of coal to do that—you have got to have labor, you have got to have this enrichment, you have got to have that much material, and so far as

prices are concerned, I will take other testimony for that; but I will use his schedule here in checking up my own figures as to what the result is. If I am satisfied from the evidence that the price of $5.90 is right, I will take his figures.

Mr. Ransom: The price is much higher now.

Q. Was not this same figure for the Astoria coal in 1918 $4.98 a gross ton?

Mr. Ransom: That is objected to.

The Master: Why, I am going to let Mr. O'Brien ask it if he still thinks he should ask
16553 it after what I have just said.

Mr. O'Brien: Will your Honor then throw out all the figures in the right column? What good are the cents per thousand cubic feet if you are going to—

The Master: They are this use: If, irrespective of the witness's testimony, I have other testimony in the case that convinces me that $5.90 is the price at which I must figure the coal in, then why talk about throwing the column 52.68 out, if I am convinced of the two factors that make it up? In that case I will take it.

Mr. Ransom: I am willing to have this wit-
16554 ness interrogated on prices if it is desired.

The Master: I want to save time.

Mr. Ransom: Yes.

The Master: I have been trying to explain to Mr. O'Brien that he need not cross-examine this witness about prices because his testimony means nothing to me about prices.

Mr. O'Brien: We get right here a difference of 92 cents a ton, and that will mean a difference of 6.41 per thousand cubic feet of gas made.

Mr. Ransom: The 4.98 in 1918 means nothing on the present price of coal.

The Master: You can safely proceed, Mr. O'Brien, with the cross-examination as to the quantities of material used, the quantities of residuals obtained, and the quantity of enriching oil required, and the quantity of tar obtained, and forget prices, so far as this witness is concerned. I can't do any more than that.

Mr. Ransom: As to coal and oil. Of course he has testified as to labor.

The Master: This figure here, that he figures repair labor at six cents per thousand cubic feet, I am not going to take his statement as proof of 16556
the fact at all, standing alone.

Mr. Ransom: I don't just see what your Honor means.

The Master: What I mean is this, that is the result of a calculation. I am going to do my own calculating, I will not take his figures. When he says "Miscellaneous works expense" so much, I am not going to take his calculation, I am going to do it myself. The books must show. It is based on books, it is based on actual operation. What I want this witness's testimony for, and where it is important to me is his absolute statement that it will take 200 pounds to make gas, and 16557
the actual operating results in Astoria show they needed 208 pounds during one year.

Q. Right on that point, Mr. Woods, do you know what they used in any particular year at the Central Union?

A. I do not recall the figure; I should say it would be around there.

The Master: Let me ask you, Mr. O'Brien, just to focus attention, is it the contention of your engineers that the statement of Mr. Woods

is incorrect that it takes 200 pounds of coal to make a thousand cubic feet of gas?

Mr. O'Brien: I would not be able to answer that right here.

The Master: Next question.

Mr. O'Brien: When we get down to some of these quantities we will be able to—the question of quantities here is something—put it in another way, every item on this schedule comes down to fractions of cents, say the cyanogen, and the ammoniacal liquor, and so on, all these are little
16559 things, they are small fractions, but they are going to count in the aggregate, and that is why the generalizations of the witness are rather upsetting to me.

By Mr. O'Brien:

Q. Mr. Woods, you have not brought in any figures here of costs, for a given period in making coal gas, of the Central Union Gas Company?

A. No, I have not those costs with me.

Q. And you have not any units of costs or quantities for any other companies making coal gas in the country, in or out of New York?

A. No, I based it on conditions in New York.

16560 Q. You have not struck an average of the quantities of bituminous coal used at the Central Union or Kings County when they were making coal gas, or any other coal gas plant?

A. No.

Q. And they make coal gas in the Westchester Company, do they not?

A. At times, yes.

Q. And they are making it today up there?

A. I do not think they are making any today.

Q. And the comparison of the quantities used of

the various companies there over a given period would give us some idea of the range, would it not, the maximum and minimum quantity of bituminous coal used for making a thousand cubic feet?

A. The range of their operations, yes.

Q. What would be the variable elements in the quantities entering into the making of coal gas—the elements entering into the quantities of bituminous coal? The quality of the coal would be one?

A. The quality of coal.

Q. The condition of the apparatus?

A. The quality of the coal, the matter of heat. 16562
As I stated before, Mr. O'Brien, you can run in making 4.75 cubic feet to the pound of coal, or you may run to 5.25 or 5.3.

By the Master:

Q. You are getting away, Mr. Woods. What are the factors, the variable factors that must be considered in analyzing any table of averages or results of operations?

A. Well, the factors in my computation here, using 200 pounds at five feet to the pound, would be an average operating condition, your Honor.

Q. We know that, but what Mr. O'Brien wants to know is this: When he takes the results of opera- 16563
tions of the Central Union and the Westchester and the Kings County and others, and he finds that some of them do better than five and some do worse than five, what is it that accounts for the variation? Is it the quality of the coal?

A. The quality of the coal would have something to do with it.

Q. Is it the character of the apparatus.

A. That would have something to do with it.

Q. Is it the efficiency of the men using the apparatus?

A. That would have something to do with it.

Q. Would the temperature have something to do with it?

A. The temperature of the apparatus.

Q. Would have something to do with it?

A. Would have something to do with it.

Q. What other factors would enter into it?

A. What I was trying to bring out, your Honor—

Q. No, what other factors would enter into it?

A. Those would be the factors, the question of temperature of apparatus, the quality of coal.

16565 Q. The efficiency of operation?

A. And the efficiency of operation. The only thing I wanted to bring out, your Honor, was that 4.75 might be just as good as 5.25, because with the higher yield we get a lower candle power and a lower B. T. U. That must be a matter of consideration in an analysis or figure of that kind. At either 4.75 or 5.25 you would get under good operation almost the same candle power feet out of a certain quantity of coal, and you would get the same B. T. U. At a lower yield per pound you would have a higher candle and a higher B. T. U. value, and at a higher yield you get a lower candle power and a lower B. T. U. value.

16566 Q. Right here, would you consider that these variable elements entering into the quantity of bituminous coal to be about on an even basis in the Central Union and the Astoria?

A. I should not think there would be very much difference.

Q. And the Westchester?

A. In Westchester their operation has been small. The Westchester probably would not compare to the same extent with these figures.

Q. They would use larger quantities?

A. They would not compare quite as well.

Q. The smaller the company the larger the quantities of coal used?

A. Not necessarily.

Q. You know something about their management up there, do you not?

A. Yes. Their coal gas operation has been comparatively small in Westchester County.

The Master: That is what Mr. O'Brien wants to know.

Mr. O'Brien: I am trying to get a basis of comparison.

The Master: Would that necessarily indicate 16568
they would use more coal, because their operation is so small?

The Witness: No, if their apparatus was of the same type.

By the Master:

Q. Is it of the same type? What Mr. O'Brien is trying to get at is this: He has figures undoubtedly of operation of the Westchester Company, the Central Union and other companies.

A. Yes.

Q. Which he would intimate by the questions asked are different from the figures you gave and show better results than that. What he wants to 16569
know is whether he can safely assume that Westchester operates under the same general conditions, whether the results ought to be about the same as the Astoria and Central Union, and if not, why not?

A. The Westchester conditions ought to be about the same.

By Mr. O'Brien:

Q. Taking the pounds of bituminous per thousand cubic feet, what would be the range of your quantities of bituminous coal? You fixed the average in your mind at 200 pounds?

16570 George E. Woods, Cross.

A. 200 pounds, yes.

Q. What would be the range above and below that?

The Master: That you would expect to find in actual operation at any of these plants about which Mr. O'Brien has been speaking.

Mr. O'Brien: Yes.

A. I should say from 185 to 215, probably, would be the range.

Q. If we were to take the quantities of the Central Union over a range of fifteen years, and the quantities of Astoria since they first began to make coal
16571 gas, as determined from the returns made to the Public Service Commission, that would give us an average on which we might make safe calculations, in your opinion?

A. Yes, you might predicate the average of the Central Union covering a period of years and the Astoria covering a period of years. There would be some difference.

Q. The range of fifteen years would make up for the abnormalities of a given year?

A. The Astoria has not been in operation fifteen years.

Q. I mean since it was put in operation.

16572 A. That would give you a range, yes.

The Master: You should expect to find that range between 185 and 215, or pretty close, would you not?

The Witness: I think so, yes.

The Master: That is what you would expect to find from those reports?

The Witness: Yes.

Q. If we took the whole range of years of the various companies, the falling off in the quality of a given year or a given period would be compensated

for in the average by the good qualities of other years?

Mr. Ransom: I object to the question. It is indefinite and argumentative.

The Master: I think it is argumentative.

Mr. Ransom: We are dealing now with present conditions and not past conditions.

The Master: I think I brought out for you, Mr. O'Brien, as a basis for further discussion and presentation by you, and as bearing upon this witness's statement, that 200 pounds is required for a thousand cubic feet of gas, that he 16574
stands by the statement that he should expect to find in the reports of the Central Union and the Astoria and the Westchester Lighting figures which would bear him out to the extent of a range of 185 to 215, and I think we have enough on that.

Mr. O'Brien: Exception to the ruling on the admissibility of the question.

The Master: To save time I am going to ask you, is it your contention that that statement is not correct?

Mr. O'Brien: Well, I am not able to state that to you just now. 16575

The Master: Very well. Next question.

Mr. O'Brien: One of the purposes I am asking the witness these questions for is this, your Honor—to try to find out why they have not come in with concrete figures instead of giving us a hypothetical figure. You will recall that since the cross-examination began—

The Master: It is not hypothetical.

Mr. Ransom: There is nothing hypothetical in it.

The Master: Let me say a word about "hypothetical" for a minute. It is not a hypothetical figure at all.

Mr. O'Brien: It is an opinion figure.

The Master: It is not an opinion figure at all.

Mr. O'Brien: I just want to call your Honor's attention to the fact that since the cross-examination began Judge Ransom has referred to the witness's testimony as opinion testimony.

The Master: In some respects that is so.

16577 Mr. O'Brien: Well, that is what he said. Now, he did not say in some respects.

The Master: I do not care what Judge Ransom says, and I do not care what you say.

Mr. O'Brien: He said he was going to give opinion testimony.

The Master: I do not care what you gentlemen say; what I want is the fact.

Mr. O'Brien: You can see what I have in my mind. I do not want to prolong the discussion. If Mr. Miller or some other expert were here giving expert opinion we would immediately proceed to find out what the basis of it was; then he

16578 would get down to the concrete and he would say, "The basis of my figures are the results of so many companies, I found out there it was so much, and there it was so much," and where they used less quantities they probably had an explanation for it, and where they were using more there was an explanation for it; but here hopping around from one branch of this witness's testimony to the other, we are not getting anywhere.

The Master: But here is the situation as I see it: You must have assumed from what I have

been saying time and again for weeks, and perhaps months, that one of the things I wanted to know is how much coal it took to make a thousand feet of gas. This witness goes on the stand and says, "I am a gas maker and a gas engineer, I am running these plants, I have been running them for years; I know the results, I know what we have got to have. I know how much coal I use, I know I have got to have 200 pounds of coal."

Now, if that figure is substantially correct, if your experts give you as their judgment, based 16580
on their experience and their knowledge, the fact that that is about right, what is the use of wasting time with it? That is the answer to it. This is not a game of tricks. It is an effort to find out what the fact is. I confess I am surprised when you say to me that you cannot tell me how much coal you claim it takes to make a thousand cubic feet of gas. I would know it if I were trying this case for the defendants. It is the first thing I would know.

Mr. O'Brien: Let me call your attention to one matter here. I do not want to get over onto it until we reach it, but you brought it out. He 16581
gave us a figure on water gas, and delving into the books, we found it was far different, didn't we?

The Master: I do not know. What I want to know is how much coal you claim it takes to make coal gas, how many pounds of coal you say it takes to make a thousand feet of gas. I think I am entitled to know it.

Mr. O'Brien: The point in my mind is that I do not think it is fair to the Court, when they put an employee on and attempt to justify the ac-

16582 George E. Woods, Cross.

tual quantities used by the complainant and affiliated companies by first stating what they are, and try to keep our minds occupied, and give us what is an opinion figure, that is all.

The Master: You cannot get away from me for a second on my proposition that you ought to know what your contention is.

Mr. O'Brien: I am not going to tell you what I think it ought to be.

The Master: I cannot force you to, but I think you ought to.

16585 Mr. O'Brien: Of course, you cannot. I am not coming in here to supplant or substitute some statement here for what may be brought out on the record. I say to you now—

The Master: You say he is too low?

Mr. O'Brien: I say to you now that what they ought to have done, and what you would expect them to do would be to come in here and say it took so many pounds of coal, and here is the proof of it over a range of years.

The Master: They say that.

Mr. O'Brien: Hard times do not require more pounds of coal to make gas.

16584 The Master: But they say they have that in the books offered in evidence.

Mr. Ransom: We got up a detailed schedule showing it.

Mr. O'Brien: They have not that; they have prices in them.

Q. Now, Mr. Woods, I want to ask you as to the quality of the coal that you received during the year 1918 at Astoria?

The Master: What do you want to ask him about it?

Mr. O'Brien: Was it of standard quality?

The Witness: It was the best gas coal we could get.

The Master: Was it as good as you had been getting in previous years? Was it a standard grade, good coal?

The Witness: It was a good grade of coal. It was—some of the coals were high in sulphur. There were times when some few cargoes were not as good, as a result of pool operations, but most of the coal ran high in volatile matter. That is, at times we had some trouble with purification. 16586

The Master: It wasn't as good as you have had in other days, was it, generally speaking?

The Witness: Well, it might not have been quite as good, your Honor.

Q. Was it as good as the coal you received, generally speaking, in the year 1917?

A. Well, I should say there was very little difference.

Q. And would you say the same thing as to 1916 and other years down to 1906?

A. Well, there may have been some difference; that is, the cargoes varied, as I say, when we got some pool coal. 16587

The Master: I am talking now about generally speaking throughout the year. What I am trying to get at is, and I imagine Mr. O'Brien is, as bearing upon the quantity of coal necessary to make a thousand feet of gas, and in analyzing the 1918 and 1919 operating figures—

Mr. O'Brien: I am talking about bituminous now.

The Master: Talking about bituminous coal. How did it generally compare with, say, 1912? Would you say it was anywhere near as good?

16588 George E. Woods, Cross.

The Witness: I should think it was almost as good, your Honor.

The Master: You think it was almost as good?

The Witness: Almost as good.

The Master: Taking the year as a run?

The Witness: Yes. I do not think it would fit right up to the average, but it was almost as good.

Q. You have been getting as good coal as has been produced each year?

A. We were getting as good coal as we could get.

16589 Whether it was better coal—I could not say it was the best coal produced in the country, because there are some coals that are better than we use, but as the result of freight rates and so forth, we cannot get them.

Q. You have heard the testimony of Mr. Gawtry, haven't you?

A. Yes.

Q. You were in court while Mr. Gawtry was telling us the particular coal fields that they made it a business to get their coal from?

A. Yes.

Q. The reasons for their choosing one company as against another?

16590 A. Yes.

Q. And would you say now that the company for the various years from 1906 on have been getting the best that the market afforded of bituminous coal?

A. The best the market afforded that we could get, yes.

Q. Has there ever been any complaint made? Has there been a lapse in any way?

A. Oh, cargoes vary from time to time, naturally.

Q. Has there been any complaint made to a coal company for the falling off in quality at any time?

Mr. Ransom: Objected to, not within the

scope of this witness's examination. It has been covered by other witnesses.

The Master: I will let him answer this question.

A. There have been complaints of the sulphur content, more particularly.

Q. Complaints made to the companies that furnished the coal to you?

A. Yes, at times.

Q. In what year?

A. Oh, I think that happens almost every year, some cargo or two seems to run higher in sulphur, 16592 and we call their attention to it.

Q. Well, the conditions then are the same, so far as the complaints go, from year to year?

A. Yes.

Q. The figure you have given here of 200 pounds assumes a hundred per cent quality?

A. That would depend upon what you call a hundred per cent quality.

Q. A standard quality?

A. I figured a grade of coal—the best grade of gas coal that comes to this market.

The Master: Do I understand you to mean by that, the best grade of coal you were getting dur- 16593 ing 1918?

The Witness: As I have testified, the grade of coal ran fairly uniform except for these pool cargoes, where we could not tell.

Q. You have given me a figure of 200 pounds a thousand cubic feet?

A. Yes.

By the Master:

Q. What I want to know is am I to understand you mean by that the kind of coal you are getting now?

A. The kind of coal we are getting now, every-

thing in good operating condition, my figure is 200 pounds per thousand feet.

Q. And that is the figure as to the kind of coal you were getting in 1918?

A. Approximately, yes.

By Mr. O'Brien:

Q. Would your figure be the same for all the periods since the Astoria has been in operation?

A. Yes, I would make a figure of about that.

Q. Well, would you say the same figure for Central Union?

16595 A. Yes.

Q. And the same for Westchester?

A. Yes.

Q. Well—

A. An examination of the Westchester plant justifies me in making that. It is a good carbonizing plant. I would figure that.

Q. Well, is there anything behind the times in the Central Union plant?

A. No, it is a very good plant.

Q. And would you say that 200 would represent the amount or quantity used at 42nd Street and 14th Street when they were in operation?

16596 A. Yes, they would go from—

Q. I don't want "would go." What did they do?

A. Approximately around 200.

Q. You did not go into their records, did you, in getting up this figure?

A. No, but I would know what the yield per pound was.

Q. At 14th and 42nd Streets?

A. Yes.

Q. Now, the boiler coal of ten pounds, does that include any breeze?

A. That ten pounds does not.

Q. Well, you used coke with that ten pounds?

A. Yes, we used some breeze with that ten pounds.

Q. And how much breeze?

A. Maybe five or six pounds.

Q. What?

A. Five or six pounds.

Q. Well, make it five or six; either one or the other. Which is it?

A. Well, it would vary. I would say six pounds.

Q. What is the unit you adopted in connection with this ten pounds? What did you have in mind?

A. That we would run about sixteen pounds to the 16598
thousand.

Q. You have not separated the amount of breeze in your Exhibit 354?

A. No, I have not separated it. I said we would have 100 pounds of coke for sale.

Q. You haven't set forth even in this estimate here the amount of coke you produce?

A. No. I have not set forth, but we would produce about 68 per cent of the—

Q. Well, now, will you—

Mr. Ransom: Let him finish his answer.

A. (Continuing.) About 68 per cent of the coal used would be represented in coke produced. In 16599
other words, for every 200 pounds of coal carbonized, you would get about 136 pounds of coke and breeze, of which I said 36 pounds would be used under the benches.

Q. How much did you say you got in pounds?

A. 136; 36 pounds used under the benches and boilers, and the 100 pounds would be for sale.

The Master: That is the hundred pounds you have got under residuals here?

The Witness: Yes, sir.

Q. The Astoria report showed 139 pounds, didn't it?

16600 George E. Woods, Cross.

A. It might have.

Q. 139.38?

A. I will figure and see.

The Master: For what year?

The Witness: 139.38.

The Master: For what year?

The Witness: For 1918.

Mr. Ransom: What about 1919?

Q. And what does that report represent as to the pounds used in the retort furnaces?

A. They have a figure here of 21 1/2 pounds.

16601 The Master: Well, that would allow—

Q. Give us an accurate figure, 21.588 isn't it?

A. 21.58.

Q. 21.588?

A. 21.58, I have it.

The Master: Well, that would allow more coal and coke for sale, wouldn't it, or breeze?

The Witness: Well, 21.58, then they have 9.23 pounds of breeze, 21.58 of coke, and breeze of 9.23 pounds that they used under their boilers.

Q. Just follow my questions, will you, Mr. Woods? They show a production there of 139.38 pounds of coke, do they not?

16602 Mr. Ransom: When?

The Master: For 1918, 139.38.

Q. And they say they used 21.588 pounds in the retort furnaces?

A. Right.

The Master: And nine something—

Q. And that would leave a balance of 117.80 pounds for sale or use for other than coal gas uses?

A. No. Then they used 9.23 in the boilers.

The Master: Nine and what?

The Witness: 9.23 pounds.

Q. Have you got the total quantity used under the boilers?

A. Yes, 9.23 pounds of coke and breeze.

The Master: Well, the total used in the retorts and boilers was how much?

The Witness: 21.58.

The Master: No. The total used under the retorts and the boilers?

The Witness: 30.78.

The Master: 30.81?

Q. How many pounds?

A. 30.81, your Honor, yes. 16604

Q. How many pounds of coke did you use under the boilers?

A. How many pounds?

The Master: 9.23 he says.

A. Coke and breeze, 9.23.

Q. That would make 19.23 in the boiler, wouldn't it?

A. If you apply this ten pounds.

Q. Well, added to 10 pounds it would be 19.23 pounds of fuel under the boilers?

A. If it was applied that way, yes, good operating conditions you will never have—when you can dispose of fifty per cent of your coke produced by sale— 16605

Q. I did not ask him that.

A. (Continuing.) It is good operating conditions.

Mr. O'Brien: I move to have the statement stricken out.

The Master: I would strike it out except it is meaningless in a case of this kind. I am going to let it stand.

Q. How much boiler fuel did they use in Astoria last year?

The Master: Total quantity?

Mr. O'Brien: Yes, per thousand cubic feet.

16606 George E. Woods, Cross.

A. In pounds per thousand feet, or what?

Q. Give it in pounds per thousand cubic feet of coal gas manufactured, how many pounds of boiler fuel?

A. They used in the boiler fuel that I have—the segregation of electric power house I haven't got—16.43 pounds.

Q. What did you say about the segregation of the electric power house?

A. Under the boilers in the gas manufacture—the power house operation is separately. There has been a separate item here. There would be some boiler
16607 fuel used in the power house operation which would apply to both coal and water gas.

Q. Well, how would you divide that up, on the basis of three to one?

A. No. The amount used there is small.

Q. Well, is it negligible?

A. No, there is a quantity there that is being used in both coal and water gas, for handling coal and using coal in water gas manufacture.

Q. You charge about nine pounds of coke then altogether?

A. Yes.

Q. To the boilers?

16608 A. If you recall, we had—

Q. Do you do that or not?

Mr. Ransom: Let him finish the answer.

The Witness: I want to call your attention to the 139.38 pounds that it is based upon the use of coal of 208.15, and not upon 200 pounds of fuel.

Q. Mr. Woods, let me ask you if you charged up nine pounds of coke to the fuel under the boilers, wouldn't that give you less than ten pounds of coal under the boilers?

A. It might be a pound less, or pound and a half, but I do want to call your Honor's attention—

The Master: I have got that now. In other words, if you took it on the basis of 200 pounds instead of 208, you would come nearer to 136 than you testified to than 139.

The Witness: Right.

Q. How is that?

The Master: Well, the higher the quantity, the more residuals you ought to have. His figures were based on 200.

Mr. O'Brien: Well, it don't mean they use more under the boilers because they are producing more. 16610

The Master: No, he is talking about the amount of residuals.

Q. You would not, if you were producing more coke, you would not use any more under the boilers, would you?

A. No. The difference—there would be a slight difference because you are handling more fuel, handling more coal to make an additional make of gas, and there would be a difference to that extent.

Q. I mean in the quantity of residuals in the shape of coke as increased by reason of the fact that you used 208 pounds instead of 200 pounds of bituminous coal, it does not mean that you are going to burn more coke and more fuel, therefore, under the boilers? You would have more for sale, wouldn't you? 16611

A. There would not be a great difference.

Q. You are not varying the quantity of fuel under the boilers?

The Master: No. Objection sustained.

Q. (Continuing.) Because of the increase in the amount of residuals?

The Master: Objection sustained.

Mr. O'Brien: Exception.

The Master: Of course, he would not, and he has so testified.

Mr. O'Brien: Well, he is trying to let you think that.

The Master: The only point he makes is that he would have less residuals to sell if you took the basis of 200 pounds than you have if you take a basis of 208 pounds, and that this figure of 139.38 are on the basis of using 208 pounds per thousand feet.

Mr. O'Brien: Yes.

The Master: That is what you have reference to?

16613 The Witness: That is right, your Honor.

The Master: Putting it another way, if I were to readjust your figure by showing 139 pounds residuals, less what was used, I would have to take 208 at $5.90 a ton in order to get these figures correct and in line.

The Witness: That is correct.

Q. Mr. Woods, why didn't you put under the boiler coal there, boiler house fuel, all of the fuel, why didn't you set it up so we would know all of the fuel under this expert figure you give us that is used under the boiler, why didn't you present it that way?

A. I have it in here, the amount. It is included in

16614 mine.

Q. Where is it?

A. I have given the boiler fuel in this calculation.

Q. What?

A. I have put all the boiler fuel in so far as it is concerned in this coal gas cost. That is, I took the ten pounds—the figures called for here—if you have 100 pounds of coke to sell for every 200 pounds of coal that we had to carbonize, the remaining would be for use under the benches and under the boilers, in addition to what we would have to buy, ten pounds of boiler fuel.

Q. Now, that is what you have done?

A. That is what I have done.

Q. Please tell me why in setting up your costs here, the several items representing the cents per thousand cubic feet of coal gas manufactured, you did not put in all together the boiler house fuel?

Mr. Ransom: I object to the question. The computation speaks for itself. This is a table of costs.

The Master: I will let the witness tell us why he did it this way, and why he didn't do it some other way. 16616

A. I didn't see the necessity of having a debit and credit account, that is what it would amount to, for the purpose of making up the cost, because if it was charged to boiler house, it would be credited to residuals. It would be a debit and credit account.

Q. There is from ten to twenty pounds of fuel that is not disclosed there, isn't there?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. You think you amply took care of it by just putting in a credit, do you?

Mr. Ransom: Objected to.

The Master: Objection sustained. 16617

Mr. O'Brien: Exception. About the figures for these residuals, your Honor, are they going to be considered as eliminated, subject to your own computation?

The Master: Prices I will not necessarily—

Mr. O'Brien: Prices for coal?

The Master: No, I am taking his figures as to the quantity. He says, for instance, that you get 1.2 gallons of coal tar on this basis. I don't know whether you take issue with that or not. You need not pay any attention to prices.

Mr. O'Brien: So we can go ahead and consider this Exhibit 354 as excised—

The Master: That is not an exhibit at all.

Mr. O'Brien: It is for identification.

The Master: Yes. I only had it marked for identification so you would have it for ready reference in tabulated form as to what the witness said orally. What I would like to have you do, is to get at how he arrives at a figure of 1 1/4 cents for iron oxide, for instance. So far as residuals are concerned, if your experts
16619 agree that that is probably right, that they get 1.2 gallons of coal tar, and 1 1/2 pounds of ammoniacal liquor or whatever it is, and .03 of a pound of ammonia, and so on, you need not waste any time about prices, because I do not consider him a man who knows anything about prices, except what he finds in the books.

Mr. O'Brien: Then we might say for the first group here, gas coal, bituminous, and boiler coal, anthracite, cost of coal, including handling, that all prices are eliminated, and we have there 200 pounds of gas coal and ten pounds of boiler coal—

16620 The Master: And you have to have labor for handling.

Mr. O'Brien: Some labor for handling whatever the price may be.

The Master: Yes, I am going to take his statement that he figures it at two cents. I will let you find out from him how he figures it.

Mr. O'Brien: Then under the heading "Residuals," we are not concerned with these prices and the decimal figures based on the prices?

The Master: No.

Mr. O'Brien: We are simply concerned with 100 pounds of coke and breeze for sale, and for use for other purposes?

The Master: Yes. Of course, you want to have in mind that if I have evidence in the case which justifies these prices, then I will take these calculations.

Mr. Ransom: He has made a computation from matters within his knowledge.

The Master: So far as this witness is concerned, I do not take him as a witness qualified to say what he can sell coal tar for, or what it ought 16622
to bring.

Mr. Ransom: But what it does sell for.

The Master: That ought to appear on your books.

Mr. Ransom: It does, and from contracts.

The Master: I have to take those prices from others than this witness.

Mr. Ransom: From the contracts.

The Master: Precisely. I want to make it perfectly clear to Mr. O'Brien, so he may not think he is omitting something he ought to cover, he can forget these prices—

Mr. Chambers: Except for labor handling. 16623

The Master: Handling residuals, he figures it cost him five cents per thousand cubic feet. You ought to ask him how he figures that.

Q. Take your figure there of Astoria of 208 pounds, what would be the actual amount of coke coming from that?

The Master: I thought you had already brought it out that it was 139.38.

Mr. O'Brien: This is on the basis of 208.

The Master: Yes, that is right.

Mr. O'Brien: I want to verify it.

The Master: Objection sustained.

16724

Q. Did you give me 68 per cent of 208 pounds in your testimony?

A. No, I think I said 67 per cent.

The Master: His testimony is that if you get about one-half of your coal used in residuals for sale, you are doing pretty well; that is what I understood you to say?

The Witness: That is right, your Honor.

The Master: His claim is that if you take 200 pounds of bituminous coal to make 1,000 cubic feet of gas, you should have 100 pounds of coke and breeze for sale after what you used under the boilers and retorts. That is his claim.

16725

Q. Will you take 200 pounds and figure now definitely the amount of coke produced from it?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Well, he has changed from 68 to 67 in just two or three minutes here.

The Witness: 67 would be the figure, if I said 68, 67 would have been the figure.

Q. That is the figure you now rely upon?

A. 67 per cent.

The Master: What is this 67?

16726

The Witness: About 67 per cent of the weight of coal would go into coke. If I said 68 I made a mistake.

Q. That would be how much coke?

Mr. Ransom: Objected to.

The Master: Objection sustained. I can figure that myself.

Mr. O'Brien: Well, it is a case of asking him to account for it. He has not given you that on the exhibit.

Mr. Ransom: He has given the actual figure for Astoria.

The Master: 67 per cent is 136; that is what he says. He says you take 200 pounds of coal and use it for making 1,000 cubic feet of gas, when you get through using some of the coke and breeze for the retorts and under the boilers, you will have left 100 pounds of coke and breeze for sale. The difference has been used.

Mr. Ransom: And you have to buy ten more.

Mr. O'Brien: He has not figured that out; he has not accounted for that 36 pounds.

The Master: I think he has.

Mr. O'Brien: If he has not, it will be 2,000 16728
cubic feet less.

The Master: Then the gas company will lose it.

Mr. O'Brien: No, it will be out of the computation; it will be unexplained.

The Master: No, it will not.

Mr. O'Brien: Now, that we have the witness here, we might as well clear it up.

The Master: I say it is clear. That is where you and I differ, and that is where your expert and I differ. You may be right, but I have the power to rule on it.

Q. Mr. Woods, when you made this up, did you 16729
get the actual figure showing the amount of coke used under the boilers at Astoria during a given period?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Would the figures shown on the Astoria Company's report to the Public Service Commission, on which computation might be made showing the coke used in the boilers, be more reliable than your figure here?

Mr. Ransom: Objected to.

16630 George E. Woods, Cross.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do the reports made to the Public Service Commission of the Astoria Company, show the amount of coke used under the boilers for making coal gas?

A. I should say they do, yes.

Q. In what way?

Mr. Ransom: I object to that; the reports speak for themselves. I am willing to have the reports in evidence.

Mr. O'Brien: I am not asking him to give
16631 me the figures, I am asking him to tell me in what way they are set up.

Mr. Ransom: I object. The report speaks for itself.

The Master: I will allow the question. How is it set up, as a separate item, or is it necessary to get it by an analysis of other figures?

The Witness: No, I think it is set up as a separate item.

The Master: Mr. Chambers calls my attention, Mr. Woods, to the fact that this statement shows coke and breeze sold at 6.437 per ton, and this same tabulation is based upon anthracite at
16632 $5.12 a ton. Why do you use coke and breeze that you could sell at 6.347, instead of selling it and using coal.

The Witness: The 100 pounds is all coke. The breeze has been used under the boilers.

The Master: How about the breeze; don't you get 6.437 for the breeze?

The Witness: No, the breeze would be at a lower price.

The Master: What would that be?

The Witness: Not more than $5.12, because it is a poor grade of boiler fuel.

Q. Have you ever made any attempt to sell breeze?

A. Oh, yes.

Q. Where?

A. Sold on the market. We use most of it because—

Q. Where, where and when?

A. It has been sold by the National Coke & Coal Company at times.

Q. What year?

A. They have not sold any for the last two or three years, because we found it more advantageous to use it. 16634

Q. Name the time, Mr. Woods, will you not, when they sold it and to whom they sold it, if you know?

A. I don't think they have sold but very small quantities in the last three or four years.

Q. What?

A. I don't think they have sold anything but small quantities for the last three or four years.

The Master: Can you tell us, Mr. Woods, when and where and to whom and at what price any breeze was sold at any time?

The Witness: I cannot.

Q. Then what do you base your statement on that you could get only $5.12 for the breeze? 16635

The Master: Objection sustained. The witness has already said that breeze is practically coal, and you can't get anymore for the breeze than you can get for the coal itself.

Mr. O'Brien: He didn't say that.

The Master: Yes, he did say that.

Q. Why do you include under the title "residuals," the breeze with the coke for sale or use for other than coal gas uses?

A. Well, it is coke and breeze, there might be a little. It was simply that we make coke and breeze

16636 George E. Woods, Cross.

at the price of 6.437. If I had made that price $5.12 the return for the residuals would have been very much less, and the cost of the gas would have been more.

Q. Well, you are not running a Christmas tree for the consumer in this case, are you?

The Master: Objection sustained.

Q. About what per cent of the coke coming from the bituminous coal of the quality that you have testified to today would be breeze?

A. Nine to ten per cent.

16637 Q. What do you base that statement on?

The Master: Objection sustained. We have had enough of this, I think.

Mr. O'Brien: No, we have not, your Honor. We are dealing with cents here and fractions of cents, and this is important. You might find here that all the way through it will be a cent here and two cents there and five cents here, and in the end you will get the difference between the consumers, perhaps, and this company of twenty-five cents.

The Master: The objection will be sustained.

Mr. O'Brien: Exception.

16638 Q. Have you any records in any of the companies affiliated with the complainant company or in the complainant company's office, indicating the quantities of coke that are breeze?

A. Yes, we have records, we have Astoria records as to the amount of breeze produced per ton of coal or per one hundred pounds of coal.

Q. Are they in the manufacturing book, the carbonizing record?

A. Yes, I think they would be found there.

Q. In what column?

A. I can't tell you.

Q. You can't remember?

A. No, I can't remember the column.

Q. Do you have less breeze in the Astoria plant than at the Central Union and the Westchester Company, at 42nd Street and 14th Street?

Mr. Ransom: I object to the bringing in of the Westchester Company into this matter. It is not within the City of New York; there is nothing about either the Central Union or the Westchester experience that is at all a matter of difficulty, but I do not think the Westchester situation enters into this New York City situation. 16640

The Master: Objection overruled.

A. I do not think there would be a great difference.

Q. Was not the design, when you built Astoria, to put in modern appliances and up-to-date machinery for handling coke?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Did you not put in Astoria modern appliances for handling coke?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception. 16641

Q. Was not the machinery installed at Astoria calculated to reduce the percentage of breeze in the coke produced?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. You said a few minutes ago that the report to the Public Service Commission did show the amount of coke used under the boilers. I hand you this book to refresh your memory and ask you to tell me the page and the line on which it is set forth (handing book to witness).

16642

Mr. Ransom: Handing the witness the 1918 annual report of the Astoria Light, Heat & Power Company to the Public Service Commission. Is that the document you are handing him?

Mr. O'Brien: It is presumably a copy of the report made by the Astoria Company. I am asking the witness to use it to refresh his memory and tell me where on reports made to the Public Service Commission they set up the coke used under the boilers.

Mr. Ransom: Is this the commission's copy

16643 of this report, may I ask?

Mr. O'Brien: No.

Mr. Ransom: I object to asking this witness to comment upon this report. The report speaks for itself.

Mr. O'Brien: I am not asking the witness to comment on any report. I do not want you to try and tell him the page; I want to see what he knows about it.

The Master: If anybody here knows the page, I want it, to save time.

Mr. Ransom: Pages 68 and 69.

Mr. O'Brien: Here is the chief of manufac-

16644 ture of the complainant company—

The Master: But he is not the one who makes up the reports.

The Witness: I do not make up the Public Service reports. I have testified to that yesterday.

The Master: If I had been a witness when the question was asked me I would say I did not know what was in those reports. That is what I expected him to say. Now, he said it was there and he has to look for it. The chances

are he will not find it and we will have wasted ten minutes on it.

The Witness: It shows the short tons of boiler fuel here, used under the boilers.

Q. It does not mention coke, does it?

A. No, it mentions fuel.

Mr. Ransom: The heading of that, you will notice is "Coke"—of that subdivision on page 69. On page 69 you will notice in the middle of the page the item "J Coke: Coal gas tar, water gas tar." The first of those is pounds of coke, pounds of breeze, and dollars. In the middle of 16646
that it is shown as used under the boilers and in generators.

The Master: I find here, Mr. O'Brien, on page 69, line 29, referring to coke, "Used under the boilers 9.61" and "pounds of breeze used under the boilers" with figures, and then the total breeze. Isn't that what you were looking for?

Mr. O'Brien: That does not separate the coal and water gas.

The Master: Let us go along to something else then. Anybody who has operated a gas plant for a few years ought to be able to give us these figures if Mr. Woods' figures are wrong. 16647

Mr. O'Brien: I am asking Mr. Woods to give us some figures, your Honor.

The Master: Go ahead with your next question. I am going to finish with him today.

Mr. Ransom: I call your attention to the fact that you have not asked for that figure, you have asked for the figure shown in the report. If you want the figure ask for it. If you want it for either 1918, or 1919, ask for it.

Mr. O'Brien: I do not want to get into the retort house again or we will never get through.

16648 George E. Woods, Cross.

I have asked that for my own purposes. I want to know what this witness knows about these things.

Mr. Ransom: I call attention to the fact that counsel has not called for it.

Mr. O'Brien: I am not going to assume the position they would like us to assume, that the Astoria figures being less than these we ought to take those up as being gospel truth.

The Master: Ask the next question.

Mr. O'Brien: Your Honor, I want to sum
16649 up here.

The Master: Ask your questions. Let us get through with Mr. Woods.

Q. Mr. Woods, you take the amount of coke said to have been produced in the Astoria plant of 139.38, and you use 21.588 pounds under the retorts, and 9 pounds under the boilers, and there would be a total used of 30.588, would there not?

The Master: There would be a total used of 30.81.

Mr. O'Brien: We are taking an even 9 there.

The Master: 21.58 and 9.23 is 30.81. That leaves 100 left for sale.

16650 Mr. Ransom: Out of 208.

The Master: What is your question?

Q. Is that the figure?

The Master: That is the figure. Objection sustained.

Mr. O'Brien: Then we have got it on the record.

The Master: We have it on the record a dozen times. If there is any argument based on that address that argument to me later, but do not let us waste time on this.

Mr. O'Brien: I am passing over a number of

questions that relate to the prices the witness has set up of different residuals, such as ammoniacal liquor, sulphate and cyanica, which questions were designed to bring out the differences between the prices he sets up here and the prices the Astoria say they received for them, which amount to considerable money.

The Master: Do not spend a minute on that.

Mr. O'Brien: And it is with the understanding that the witness was not qualified or called to testify on prices at all.

The Master: I am going to strike it off my memorandum here that way. But I am leaving on the labor handling at three cents. 16652

Mr. O'Brien: That I will come to in a minute.

Mr. Ransom: On the matter of striking that off the memorandum, it does not seem to me we make progress by striking that out.

The Master: I am not striking it out; I am striking it off my copy so that I have to calculate that. It is a memorandum for myself.

Mr. Ransom: The witness has made computations based on prices which he knows about.

The Master: We understand this perfectly. Let us get through with Mr. Woods. 16653

Q. The course of handling labor, labor handling, would take in what group on Exhibit 351?

Mr. Ransom: I object to the question as already asked and answered—covered very exhaustively.

The Master: I am going to let him answer it again.

A. Exhibit 351 referred to water gas, and this refers to coal gas. However, that refers to the handling of coal.

16654 George F. Woods, Cross.

By the Master:

Q. How do you arrive at a figure of two cents?

A. Based on what it has cost us, your Honor. In 1918, it cost us 1.47 cents.

Q. How do you know it did?

A. Because I had access to the records for the amount.

Q. What records?

A. The Astoria records.

Q. What records did you have reference to?

A. To the pay rolls of the Accounting Department,
16655 as to the expense involved in the handling of the coal.

Q. Did you pick out the men who were on that work?

A. I did not. That is, I knew the work, the distribution of those charges, and made my calculations from that. However, this two cents, understand, is based upon an average figure covering a period of time, and I took the number of men that we were working, covering, as I indicated in my production cost at Astoria, coal gas, to determine the number of men which it took and at our present rates it figured up two cents a thousand.

Q. So that your figure of two cents a thousand is
16656 based upon your knowledge of the number of men it takes to produce the gas and your personal knowledge of what you have to pay those men?

A. Absolutely.

Mr. Ransom: At present wages.

By Mr. O'Brien:

Q. Have you got the computation here?

A. Yes, I had that number of men. That is all in the record I gave to Mr. Chambers.

Q. You say you gave Mr. Chambers the number of men, the classes of men?

A. I did.

Q. And the wage?

A. I did.

Q. And they are as of the present time?

A. Right.

Q. Did you set up or bring in the cost of the same kind of labor a year ago or two years ago?

A. No, I brought in the cost as of today, what we are paying, the rates of pay we are paying as of today.

Q. It is all ordinary labor, is it not? There is no skilled labor involved in it?

A. Oh, yes. 16658

Q. What skilled labor is involved?

Mr. Ransom: I object. That has been fully covered.

The Master: I will let him state what skilled labor there is in labor handling.

A. We have hoisting engineers, locomotive engineers, electricians.

The Master: That is all in the labor handling, isn't it?

The Witness: All in labor handling, yes.

Q. Isn't part of that included under the electric power expense?

A. Not that part that I included. 16659

Q. Where is the electric power expense embraced here in this coal gas schedule?

A. It would be covered in those items. It would be distributed in gas production, in labor handling, and in repairs.

Q. Where are the gas workers included in this schedule, under gas making labor?

A. Under gas making labor.

Q. Do they include the men to bring in the coal in wheelbarrows or in the cars, little cars, to the generating house?

Mr. Ransom: I object to this.

The Master: What is it, gas making or gas making labor handling?

Mr. Ransom: This has been gone over and fully covered in almost the identical language.

The Master: No, it is a little different classification or different grouping.

Mr. Ransom: It is the same grouping that Mr. Chambers interrogated about. The grouping has not changed.

The Master: You mean it was covered by Mr.
16661 Chambers?

Mr. Ransom: Yes, fully covered by Mr Chambers.

The Master: I think so.

The Witness: Yes, sir. I analyzed every man, your Honor, in both coal and water gas production.

Mr. O'Brien: I am asking him for the labor and if that includes any man who handled coal.

Mr. Ransom: I object.

The Master: I would like to have the cross-examination of Mr. Chambers. Have you got the minutes of it here? I will sustain the ob-
16662 jection on the ground that Mr. Chambers covered it.

Mr. O'Brien: What will you do if your Honor finds he did not cover it?

The Master: Then I will recall him for cross-examination later. I remember Mr. Chambers took up each one of these items.

The Witness: He did, your Honor, both on coal and water gas. I testified to every item.

Mr. O'Brien: I might as well find that out and I will avoid touching on anything that he

has been questioned on if it is in here, your Honor.

The Master: You see at page 1890, 353, you are talking about, "What men did you include."

Mr. O'Brien: Let me have that, your Honor, and I will try to hold it down.

The Master: Coal handlers, that is on 353. See what I mean? He gave the number of men; he gave the wages and he gave six skilled laborers, 46 7/8 cents, and he gave all these men here, and other men at 48 3/8, making 17 in all, in order to arrive at the figure, whatever it was, on 16664
353, 354 he did not get to.

Q. Mr. Woods, is the item "Labor Handling" set up as a customary routine record in any records of the company?

Mr. Ransom: I object to the question, already asked and answered two or three times.

The Master: I will get it once more.

A. Yes.

Q. I am talking about labor handling of coal gas, now, you understand me?

A. Yes.

Q. And in what record is that kept grouped in that way? 16665

A. I don't know. It is—the pay roll shows the amount of labor involved and the amount of money in labor handling.

Q. I did not ask you what the pay roll showed. I asked you if there is any record where you have grouped here all of the men you say are engaged in labor handling?

A. No, we have not.

Q. If someone seeking to verify these figures for labor handling, coal gas costs, two cents a thousand cubic feet, goes to the Central Union Gas Company

or the Astoria Company, where would he go to find the verification of your figure?

A. To the pay rolls.

Q. He will have to pull it out himself, won't he?

A. Yes, he wants to pick out each man.

Q. There is some under gas production?

Mr. Ransom: I object to the question. It has already been gone over. He indicated just which ones in the uniform system of accounts classification were included under each of those items.

16667 The Master: Yes; objection sustained; fully covered.

Mr. O'Brien: Exception.

Q. Now, the handling of residuals. You put that down here at five cents?

A. Yes.

Q. Predicated on present costs of labor?

A. Labor and material.

Q. Is that grouped in any pay roll as such?

A. As handling residuals as such, yes.

Q. Is there one set of men that do nothing more than handle residuals?

A. Yes.

16668 Q. Do some men spend part of a day doing that, and part of the day doing something else?

A. They might, and if so their time would be divided?

Q. Always divided in the work ticket?

A. It is.

Q. And the time book and the pay roll?

A. Yes.

Q. Do you know what it is today in the Central Union Gas Company?

A. I know, but I could not recall the figure.

Q. You know but you cannot recall the figure?

A. I cannot recall it, no; I haven't it in my mind.

Q. Well, why do you say you know it?

The Master: Objection sustained.

Q. Do you know what it costs to handle residuals in any other coal gas plant in or out of New York today?

A. I have seen figures, yes.

Q. How do they compare with these; what figures were they?

A. Well, there are no coal gas plants doing just what we are doing. This five cents includes cyanic 16670
extraction, also the cost of the copper as in the cyanic extraction, all of which is under handling residuals, which amount I testified to and gave to Mr. Chambers.

Q. I have asked you if you have used in making up these figures the operations of any other company on this item? Is it built up merely out of the experience of the Astoria plant?

A. Some of it is based on the experience of the Astoria plant, and others not. The Astoria experience in cyanic extraction was based upon the Astoria operation, because it was the only company that was doing it.

Q. Yes; and what was the figure, so far as it re- 16671
lates to other residuals based upon and built upon?

A. Based upon the cost of handling materials and method of handling, which was based upon—

Q. Any of the other plants?

A. Practically our conditions as of here. I did not go to any outside, because I based it upon our operating conditions in and around New York City, which would cost us five cents a thousand for this extraction.

Q. It is based entirely as to the other residuals on the other Astoria figure, or not?

16672 George E. Woods, Cross.

A. I have an analysis of the other figure, and I indicated the number of men required to do that work under those conditions.

Q. Did you have an analysis of the figures of the Central Union Gas Company?

A. I did not need an analysis for that.

Q. Well, you said you had an analysis of the other figures of the other companies?

A. I have; I have an analysis of the Central operation.

Q. Well, did they differ with them more or less?

16673 A. I do not recall.

Q. The handling of residuals, than the Astoria Company?

A. They would probably have less, because we include everything in it.

Q. Have you that with you?

A. I have not.

Q. Are you prepared to give us what the figure was at the Central Union Company?

A. I am not.

Q. Are you prepared to give us what it is at any other company in or around New York for handling the residuals?

16674 A. I do not think there is a company in and around New York.

Q. I asked you a question; are you prepared to?

A. I am not.

Q. Oil enrichment here. Your charge for the gallons there is based upon your idea of 1.6 gallons, is it?

Mr. Ransom: I object to the question.

A. I know what it takes; it isn't an idea at all.

Mr. Ransom: I object to the question; it has been gone into exhaustively.

The Master: I will let Mr. O'Brien ask one or two questions.

Q. Well, in the plant at Ravenswood, does it take 1.6 there?

A. It does.

Q. In addition to what is used to make water gas?

A. 1.6 for the amount of coal gas they enrich.

Q. Is it any more expensive at Astoria than it is at Ravenswood?

A. No, it is about the same.

Q. About the same?

A. Yes. 16676

Q. Have the payments that have been made to the New Amsterdam Company for their enriching of the coal gas made at Astoria been based upon a uniform quantity of 1.6 gallons?

A. It has not.

Q. It has varied hasn't it?

A. It has.

The Master: The subject has been fully covered.

Mr. O'Brien: Yes, I know it has, your Honor, but it has not been covered so much by me.

The Master: No, but what difference does it make? 16677

Mr. O'Brien: I know, of course, it is in there, but I want to have a connected story.

Q. The tar credits shown in the coal gas costs here are predicated upon present day contracts, are they?

The Master: As to amount?

Mr. Ransom: As to price.

The Master: As to price, you mean?

Mr. O'Brien: Yes.

The Master: You need not pay any attention to price.

Q. Where do you get the .25 gallons of tar credit?

16678 George E. Woods, Cross.

A. That is on water gas tar?

Q. Yes, and coal gas.

Mr. Ransom: Well, water gas tar—

The Master: Oh, that is the enriching?

The Witness: Yes, that is based on the amount of tar that would come from 1.6 gallons of oil.

The Master: We have been all through that, too.

Q. Now, this item of iron oxide, city water and handling spent materials is all a labor item, or is it material and labor?

16679 A. Iron oxide is material, city water is material, handling spent material is an item of labor.

Q. Have you taken—

The Master: I remember Mr. Chambers was all over that.

Mr. Ransom: He went through that.

The Master: And we went down to the "et cetera" part of it. We spent pages on that et cetera.

Mr. Ransom: And split up the one twenty-five into its fragments.

Q. What did you include in the "et cetera" there?

Mr. Ransom: I object.

16680 The Master: Objection sustained as having been covered. Mr. Chambers spent hours on that et cetera testimony.

Q. The gas making labor you have set up here at nine cents?

A. Yes.

Q. And that embraces everybody who is grouped under gas production under Exhibit 351?

Mr. Ransom: I object to the question.

The Master: I will let him answer.

A. It comes under the same classification, yes.

Q. Does it embrace just the same groups?

Mr. Ransom: I object to the question.

A. The Exhibit 351 hasn't any relation to water gas if it applies to retort house. One applies to coal gas production, and the other to water gas, so you would not have the same items.

The Master: Well, you have included in there everybody who does go into making the gas?

The Witness: I did, your Honor, and I detailed the different men and the rate of pay.

Q. When you set up these two figures here for coal gas and water gas, Mr. Woods, does the theory of costs that you have given us, assume a plant where 16682
they are making coal and water gas?

A. Insofar as coal gas is concerned?

Q. Yes.

A. No.

Q. They are entirely separate?

A. Yes, insofar as this coal gas is concerned, in production and so forth.

Q. In other words, you have, taking Exhibit 353, that visualizes a plant where they are making only water gas of the quantities you have already testified, 10,000,000 capacity, I believe it was.

A. Right, or any plant.

Q. Any place?

16683

Mr. Ransom: Any size.

Mr. O'Brien: No, he said place.

Mr. Ransom: He said size; he did not say any place.

Q. Didn't you name a certain capacity for this ideal plant that you have in mind?

A. I did not name a capacity, but I was asked and it is testified on the record as to how I arrived at certain figures. Mr. Chambers asked me what part of a man it took to make a thousand feet of gas, and I did not answer that very satisfactorily, because Mr.

O'Brien, because I should have said that it took every man on the place to make a thousand feet of gas; that is what it takes.

Q. Yes.

A. That that same number of men can make a great many thousand feet of gas. I was asked that, to state how I arrived at those figures, and I told the Master that you would require a plant of a certain capacity, and from that I could tell how many men it required to do all these kinds of work and the Master then asked me to take a certain size gas works and tell him

16685 what elements would enter into cost of production in the way of handling material, gas making labor and repairs, and so forth, which I did, and went into the number of men in detail in each of those particular things which you will find on the minutes in Mr. Chambers' cross-examination.

Q. Well, Mr. Woods, your theory here of costs of making two kinds of gas, reduced in its various items to cents per thousand cubic feet of gas made, does assume a plant of a certain minimum capacity, doesn't it?

A. Why, absolutely, but my figures are not a theory at all; it is based upon what I know—

16686 Q. Did these figures representing costs assume a plant of a minimum capacity of a certain number of cubic feet of gas?

Mr. Ransom: What part of these figures are you referring to?

Mr. O'Brien: All of the figures.

The Master: You can answer that, I think.

A. Yes, it would be a minimum capacity. I would not testify to any such figures if it were a hundred thousand.

The Master: You said ten million.

The Witness: Ten million was the figure I made.

Q. If it was a less capacity, the cost would be different, wouldn't it?

A. If it were a small capacity it would; if we were making five or six million in a plant it might not. It would depend on the conditions as to where the plant was operated, the method of handling, and so forth, and as I testified, these figures were based upon a year's operation and not for a day.

Q. It is based—

The Master: You are not trying a little case in the Municipal Court, you know, with a jury around you. 16688

Mr. O'Brien: Well, I am going to ask your Honor to ask the witness, or direct him to answer my question, and not put in these addenda.

The Master: It doesn't do a bit of harm.

Q. Mr. Woods, isn't it a fact that with the increasing capacity of a plant you will get different costs?

A. With an increased capacity the cost does not vary a great deal, because as capacity increases you have certain overheads that increase. Your normal operation of gas makers, fire cleaners, repair work, boiler tenders, and so forth, whether it is a large or small plant, as they go up those same elements go up 16689 almost regularly.

Q. Do you mean to say the overheads are increased with the increasing volume of business?

A. I say the overhead does not remain stationary.

Q. Doesn't it decrease with the increase in volume of business?

A. But it does not stand still, because you have—for instance, you would have a superintendent's assistant, where in the other place you might have an assistant superintendent, a superintendent's assistant and two or three foremen to look after the job, so that

you do, while some of the overhead remains constant, you do have an added overhead when you increase the capacity of that plant.

Q. Well, isn't it axiomatic that in any event your overheads will decrease with your increase in volume of business?

The Master: Objection sustained.

Mr. O'Brien: Exception.

The Master: If it is axiomatic, you don't need him to tell us.

Mr. O'Brien: He has just said that some go
16691 down and others go up.

The Master: Take his testimony.

Q. Now, if you were to increase the capacity of the Astoria plant ten fold would not the expense of making gas there decrease?

A. Some of the overhead might decrease.

Q. Wouldn't the total amount decrease?

A. The difference would be infinitesimal?

Q. The decrease would be infinitesimal?

A. It would in a large plant of that kind. If you doubled the capacity of the plant the production cost would be no less in my judgment.

Q. When they designed this plant was it not with
16692 the idea of increasing the facilities and increasing the capacity over there, and that you were going to cut down the cost of making gas? A. Not necessarily. They went there to build the best plant they could, and they did, and to operate it as economically as they could.

Q. Was it not their purpose, Mr. Woods, to make a plant of such a large capacity that they would thereby cut down the cost of making gas?

The Master: Objection sustained as having been already asked and answered.

Mr. O'Brien: Exception.

Q. Now, if you combined in this theoretical plant--

A. It is not a theoretical plant.

Q. The making of gas by the two methods, would not various items of expense be reduced and some eliminated?

A. Yes, there would be an element. One particular element which would be of advantage would be the transportation where you use coke in the generators, would be the transportation of the coke from the retort house to the generator house.

Q. That would go to an item in the water gas schedule of prices? 16694

A. Yes, that would help.

By the Master:

Q. In other words, taking the Astoria plant, which makes both water gas and coal gas, you would expect to find a better result than from two separate plans?

A. You would save in transportation, and you would have less breakage in the coke from handling, you would get less breeze.

Q. In other words, you say that at Astoria the actual results ought to be better than the figures you show here?

A. Insofar as the handling of coal—you can use to greater advantage the coke from the retort house directly to the generator house, than when you have to send it over here. You get a little better result in the coke itself, because it is not so small for one thing, and the other is that you have less breakage of the coke into breeze. 16695

By Mr. O'Brien:

Q. Would not your gas making labor be reduced?

A. Not necessarily. If you are using it on coke you have to use twice the volume to handle it.

Q. There is one Mr. Woods running two plants and he is drawing down a big salary—

Mr. Ransom: I object to that.

The Master: Objection sustained. I think we have had that pretty fully.

Mr. O'Brien: I want him to enumerate the various items that would be affected by the combination of the two plants.

The Master: No, I will not take it.

Mr. O'Brien: Will your Honor permit me to ask the questions and you can rule on them?

The Master: You have asked them, and I have ruled.

16697 Mr. O'Brien: I will just sum it up.

Q. Mr. Woods, please state what in your opinion would be the various items of expense in your coal gas cost, as per Exhibit 354 for identification, and your water gas cost, as per Exhibit 353 for identification, if this ideal or theoretical plant making each kind of gas was combined with the other, in other words with both gases being made in the same place?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Woods, in transferring your coke from your coal gas plant to your generating houses of the water

16698 gas plant, you take it over directly, don't you?

A. We do.

Q. Take it hot from one place into the other.

A. We do not.

Q. How long do you keep it before you use it?

A. Oh, 24 hours possibly.

Q. By being able to take it directly you avoid the duplication of labor, don't you?

A. We have got to transport it from one point to the other. It is drawn off from the coke bins and taken to the generator house. The difference would be that if we were taking it to New York we would

put it in the same car that we put it in now to take it to the generator house at Astoria, but that car instead of going to the generator house would go to the dock where it would be dropped on to a belt conveyor and on the boats and conveyed to New York.

Q. There would be a saving not only in the breaking of the coke, there would be a saving in the duplication of labor, there would be a saving in the heat qualities of the coke would there not?

A. I have testified as to what the saving would be. The coke is somewhat better. Insofar as the labor of handling it we would use the same car and the 16700
transportation would be shorter by going to the generator house than to the dock where it would be unloaded. We would save the barge transportation from Astoria to New York wherever it might go and we would save some of the handling over here. There would be additional handling on this side that would tend to to break the coke.

Q. Mr. Woods have you included in either of these schedules of cost here any expense of joint facilities?

A. That hasn't anything to do with this at all.

Q. I am asking you a question?

A. Absolutely not. This is production cost.

The Master: It is included in the distribution 16701
cost?

The Witness: It is not included in the distribution cost. If it were there it would be that much higher instead of being 89 cents it would be 96 or 97 cents.

Q. What is that?

A. I say if the use of the joint facilities were included in these items—this is based on the assumption that the Consolidated Gas Company could make all of its gas and would not have certain joint facilities used. They are not included. If you included the

16702 George E. Woods, Cross.

joint facilities it would add to this. This figure is based upon an estimate that the Consolidated Gas Company has a plant capable of making all of its gas. It does not include any interest charges.

Q. Did some one tell you, did counsel advise you to exclude that from your estimate?

Mr. Ransom: I object to that as immaterial. This a table of production cost. It has no relation to capital items at all.

The Master: I will allow it, that is the quickest way.

16703 A. No.

The Master: Mr. O'Brien you have some few questions to ask?

Mr. O'Brien: Yes.

The Master: Then we will take a recess until two o'clock.

Mr. O'Brien: Your Honor I would ask that the hearing be adjourned until tomorrow. I cannot see any reason why because I have an examination of the witness that it should go over until the afternoon.

The Master: Your request is declined. Mr. Woods has been on the stand for seven or eight

15704 days—

The Witness: More than that.

Mr. Ransom: Eleven.

The Master: Eleven court days. I think we have reached a point where Mr. Woods ought to be excused from attendance as quickly as possible. I am continuing this hearing this afternoon at a great personal inconvenience to myself and this witness is going to be finished with.

Mr. O'Brien: I want to state to your Honor, and for the purpose of the record, that continuing the examination during this afternoon is out

of the regular program laid down by your Honor.

The Master: I understand that.

Mr. O'Brien: These hearings so far as the hours and the days are concerned have in no instance as yet been arranged for my convenience.

The Master: I am sorry about that.

Mr. O'Brien: My convenience has not been consulted in any way, and where other exigencies arose the days were changed and the hours were changed.

The Master: Court is adjourned until 2 o'clock Take nothing more on the record. 16706

Recess until 2 P. M.

Afternoon Session.

Mr. O'Brien: I would like to ask counsel for the complainant if it was his purpose to produce the witness, Mr. Woods, on the whole scope of operation expenses, the actual expenses?

The Master: I will not permit any discussion of it. I am going to ask you to go ahead with the cross-examination and get through with this witness. I will not open up any field for discussion now. 16707

Mr. O'Brien: That would limit the examination, your Honor.

The Master: You may ask your questions and I will do the limiting.

Mr. O'Brien: In other words, if he is produced here, and this is our day to examine him, on all the operating expenses as shown in the books of account, then we ought to know and it would be very likely that his examination on that score should be adjourned until after the bookkeepers and accountants have testified.

16708 George E. Woods, Cross.

The Master: The cross-examination is a perfectly simple proposition. You are entitled to cross question this witness on everything he has been asked about on the direct.

Cross-examination continued by Mr. O'Brien:

Q. Is the item "Gas Storage" in this coal gas cost entirely one of labor, Mr. Woods?

Mr. Ransom: I object to the question as already having been fully covered.

The Master: Objection sustained.

16709 Q. How much is labor and how much is material?

Mr. Ransom: Objected to on the same grounds.

The Master: Objection sustained. That matter was covered by Mr. Chambers.

Q. Where it includes painters, or men employed in and about the holders, does it include the cost you paid for the paint?

Mr. Ransom: Objected to.

The Master: Same ruling.

Q. Does it contemplate any work being let out on contract?

Mr. Ransom: Objected to.

16710 The Master: The same ruling, and the Master rules that no further questions shall be asked about that item, that it was fully covered by Mr. Chambers.

Mr. O'Brien: I pass over the cost of distribution, your Honor, as—

The Master: There were some items in cost of distribution that I let Mr. Chambers cover.

Mr. Ransom: About fifteen cents.

The Master: I am quite sure any questions asked with reference to the items that Mr. Chambers has covered I will rule out. As to the bal-

ance I have refused to take the witness's statement. If it will help you any to get it clear in your mind I will have the witness repeat again what it was he testified to before that made up about fifteen cents of the cost of distribution. Have you got those items?

The Witness: It was on the Street Main Department and the Meter Department and Renewals and Replacements.

By the Master:

Q. In renewals and replacements, there was an extra 3 1/2 cents?

16712

A. Yes.

Mr. Ransom: Work on consumers' premises was also included?

The Master: Yes, I remember that.

The Witness: The meter shop work included work on consumers' premises.

Mr. O'Brien: That includes work, then, on appliances?

The Master: Yes, he so testified.

The Witness: I testified to that, although my nineteen cents did not include work on appliances. The nineteen cents that I put in here excluded appliance work without giving a credit; in other words, as if this cost were nineteen cents if we did not do any appliance work whatever, your Honor. The nineteen cents did not include any appliance work at all. That would amount to about five cents, of which there would be a credit to that from the rentals of appliances.

16713

Q. Well, you have omitted it from these figures?

A. The appliance business is entirely eliminated from the 19 cents. There was no debit or credit made. It is as if there was no appliance department whatever. That 19 cents covered those items, excluding the ap-

pliance department in every way. So there was no credit or debit to that department. If it were included, it would be 22 cents, instead of 19.

By Mr. O'Brien:

Q. Did you exclude all repairs to appliances from this item?

A. Applying to the appliance department, yes. The 19 cents would not include repairs to appliances in any way. The appliance business is in the utilization or promotion department and would not be included in this account. 19 cents would take care of distribution.

16715 Mr. Ransom: I call your Honor's attention to the fact that if this examination along this line is continued, this witness would have to be interrogated regarding commercial and utilization department expense and general office expense.

The Master: No.

Q. Does this include any work done on consumers' premises?

The Master: Yes, he said it did. Did you not?

The Witness: It would include some work on consumers' premises in the way of leaks and so forth.

The Master: That is what he said before. He

16716 is repeating what he said.

The Witness: 19 cents would cover the actual item of operation without any revenue from that in its operation.

Q. The setting up of appliances in consumers' premises, the investigation of appliances in consumers' premises, the looking for leaks in connection with appliances in consumers' premises, the repairs and labor and handling appliances, are they in part or entirely included in this item of distribution?

A. They are not included. That would be a debit against the receipt—

The Master: You have answered that it is not included.

Q. Are they in part included—to any extent included?

A. Not to any extent, those items. If there were leaks and they were repaired, that might come in and might be included in it—a house leak, and they might go to investigate it.

Q. When you made up that figure, what did you base it on: the experience at Astoria?

A. Absolutely not.

Q. Astoria has not got any distribution system? 16718

A. No.

Q. Then you took and added on to the theoretical plant making coal gas the distribution expenses of a water gas system, did you?

Mr. Ransom: I object to the question. He said the distribution expense was the same for either coal or water gas. It was fully covered.

The Master: Let the witness answer.

A. Yes, insofar as distribution is concerned, it had no connection with cost of production in any way. The figure of 19 cents is based upon my knowledge and experience and analysis of figures in connection with the Standard Gas Light Company and the Con- 16719
solidated Gas Company.

Q. What other companies?

Mr. Ransom: I object to the question. It has been fully covered.

The Master: I am going to take it.

A. The other affiliated companies.

Q. Did you take an average of distribution costs for a given term of years?

A. No, I did not take an average cost. The cost of distribution of both companies is in excess of the figure I have given.

Mr. O'Brien: I move to have that stricken out, the latter part of the answer.

Mr. Ransom: I think it should stand.

The Master: I will let it stand.

Q. For what years?

A. The year 1918, 1917.

Q. For the Central Union and Astoria?

The Master: The Astoria has no distribution.

Q. For the Central Union?

A. Yes, the Central Union.

Q. The New Amsterdam?

16721 A. Yes.

Q. The Consolidated Gas?

A. Yes.

Q. They are all in excess of 19 cents?

A. Covering those items they would be excess.

Q. Covering what items?

A. They are included in the cost of distribution as indicated by me.

Mr. Ransom: Including appliances.

Q. What was the figure shown by the Consolidated Gas Company for the year 1918 in its report to the Public Service Commission?

A. I do not know what they reported.

16722 Q. For distribution?

A. I do not know what they reported to the Public Service Commission.

Q. What was the representation made in the report of the New Amsterdam Gas Company for their distribution expenses for 1918?

Mr. Ransom: I object to interrogating this witness regarding the reports of the Public Service Commission. If counsel for the defendant Swann wishes the 1919 or the 1918 figures as to any of these companies with which this witness has knowledge, they can be had; but merely inter-

rogating him as to what somebody reported is a very different thing.

The Master: Do you know what they actually included?

The Witness: I do not, your Honor.

Q. Mr. Woods, did you have before you when you made up this figure of nineteen cents the figures of the officers, or the final figures, of the New Amsterdam Company?

A. I saw figures of the New Amsterdam Company, yes.

Q. Did you have them before you when you made 16724
this computation of nineteen cents?

A. No, I do not think I did at the time.

Q. Did you have the figures of the Standard or the Mutual or the Consolidated Gas Company for 1918?

A. Probably not at the time, but I saw the figures.

Q. You are speaking about the final figure now?

A. I saw figures of their distribution charges.

Q. Have you seen Mr. Teele's exhibit, the accountant's exhibit in this case, covering the distribution expenses?

A. I have seen Mr. Teele's exhibit, yes.

Q. What did that figure up for cost of distribution in cents per thousand cubic feet for distribution? 16725

A. I do not recall.

Mr. Ransom: For what year?

Q. You cannot recall it?

A. No, I do not recall what his figure was.

Q. Can you recall any of the figures of any of the affiliated companies or the complainant on distribution—the final figures O K'd by the company for any year since 1906?

A. No, I cannot recall at the moment.

Q. Have you brought any data that would enable you to state what were the final figures that they have

set forth as their claim of distribution expenses for these years?

A. No, I have not any of those figures with me.

Q. Did counsel tell you not to prepare schedules that would show the representations of these several companies for the periods I have mentioned, as to distribution expense?

A. He did not.

Q. Did you discuss it with him?

A. I do not recall having discussed it with him.

Q. Did you discuss this matter with Mr. Teele?

16727 A. I did not.

Q. Have you had any discussions with Mr. Teele about the work that he was doing on the books of the complainant and the allied companies?

A. I have talked to Mr. Teele only in a general way. I have not gone into what he was doing. I knew that he was up there and going through the books of the company. I do not know to what extent or anything about it.

Q. When did you prepare this figure of nineteen cents? A. Four or five weeks ago, probably.

Q. What would have been your figure a year ago if you were asked as to the distribution of coal gas

16728 and the expense expressed in cents per thousand cubic feet of gas?

A. Do you mean distribution of coal gas? Why do you refer to coal gas? Do you mean distribution of any kind of gas?

Q. You have an exhibit No. 354 that is here, and you have nineteen cents there. What would it have been if you were doing this a year ago?

A. I would have had to analyze the figures a year ago, and probably it would have been a little less on account of the cost of material and labor.

Q. You do not carry that in your head?

A. Oh, I do not carry all these things in my head.

Q. You do not even attempt to approximate it?

A. I think it might be a little less, because the price of labor is more now than it was at that time, and that would account for a difference.

Q. Has the quantity of repair work per month been less in 1919 and 1918?

A. Oh, the repair work will vary from time to time, the period of the year.

Q. Well, all of the repair work, or at least all of the distribution expense of the Consolidated Gas Company is bulked with that of the other companies, 16730
isn't it?

A. I do not get that question. No, it is not.

Q. Well, your repairs to mains are?

A. Well, that is only a small part of it.

Q. Have you got a separate sheet department in every one of the affiliated companies?

Mr. Ransom: I object to the question. That has been fully gone over, it is perfectly clear.

Mr. O'Brien: It has not been fully gone over, your Honor.

The Master: I won't allow it.

Mr. O'Brien: Nothing fully about it. He says now that the matter of repairs to mains is only a 16731
small part of that expense.

The Master: I will sustain the objection.

Mr. O'Brien: Now, your Honor, it is the question as to how he got this unit, whether he has taken as a basis of his computation that of any one company, or the average of several companies, and whether he has added to that because of present prices. We ought to be able to find this out from the witness.

The Master: I have let you go as much as I think you ought to.

Mr. O'Brien: Well, that is going to be very vital here.

The Master: That is why I have let you ask the questions up to this time.

Mr. O'Brien: Your Honor, you will recall that on repairs to mains he said they did all that and they charged up to the other companies on a certain basis the cost of doing the work.

The Master: Go ahead, next question. I sustained the objection.

Q. Mr. Woods, have you ever figured out what
16733 might be saved to the complainant company if the system of the complainant and the allied companies, street system, was reduced to one main for every street?

Mr. Ransom: I object to the question, it is immaterial.

The Master: I will allow it.

Mr. Ransom: But how is that a pertinent inquiry here?

The Master: Why, under the claim of economy in operation. I will allow it.

Mr. Ransom: We are not undertaking to charge these consumers with the expense of all
16734 the companies.

The Master: I will allow this question.

Mr. Ransom: Exception.

A. I have not.

Q. There would be a substantial saving in expense to all concerned, would there not, if instead of having three or four or five sets of mains in a given street, the complainant and allied companies had but one main system?

Mr. Ransom: Same objection.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, it may be disre-

garded afterward, but allow the record to be made so that the Court will have it.

The Master: No.

Q. You say it is only a small part of the—the repairs to mains is a small part of the distribution expense. What is the dominant item in the matter of this expense?

A. Well, distribution, superintendence street department, shops, supplies expense, sundry meter and installation work, work on consumers' premises, repairs to meters, services and mains, commercial expense. 16736

Q. There is a commercial expense included?

A. General miscellaneous office expense. Yes.

The Master: Yes, it is included in the 19 cents, but I do not take his testimony on that.

Mr. O'Brien: Yes, that part of it you are excluding?

The Master: Yes.

Q. Well, have you got a separation of these other items of this 19 cents?

A. I have got a segregation here of all the items including the—I can give you the items here including the expense involved in handling appliances. It foots up to 24 cents. 16737

Q. Foots up to 24?

A. Yes.

Q. Well, in other words there is five cents—you allowed five cents to handling appliances?

A. It figures to about 23 cents, but the average condition of the allied companies would be about 24 cents; of the Consolidated it would be about 23 cents, including the handling of appliances.

Q. Well then, this would represent a composite figure based upon the experience of all the companies?

A. The conditions—operating conditions in New York City, yes.

Q. How do you divide that 19 cents; will you give me that?

A. I can give you the amounts here of the different items.

Q. 23 or 24 cents, how do you divide that?

A. There is the distribution account including superintendence of street department, shops, supplies and expense, and sundries was two cents a thousand; meter and installation work, setting meters, doing jobbing and sundries, one and one-quarter cents; work on consumers' premises, setting appliances, burner work,
16739 jobbing and sundries two cents; repairs on mains and services, meters, appliances and miscellaneous repairs, four cents. And do you want me to go through the 23 cents?

Q. Oh yes, we want it all.

A. General expense—

The Master: What is the one you are reading now?

The Witness: General expense.

The Master: What do you mean, general expense?

The Witness: That is commercial.

The Master: The commercial department?

16740 The Witness: Yes.

The Master: How much?

The Witness: There is general expense, high bills, appliance department, indexing, bookkeeping, collecting and cashiers' department, credit department, appliance department, supplies and expense, and promotion, six and one-half cents; and there is general miscellaneous, general office expense, supplies and expenses, legal expenses, claims in arrears, insurance, vacations and sickness, contribution to the mutual aid, stable expense, automobile expense and claims for dam-

ages, superannuation and uncollectible bills, interest on deposits, miscellaneous general expense, which costs seven and one-quarter cents. That makes a total of 23 cents, to which was added one cent to average conditions of the allied companies with the Consolidated, making a total—

Q. Don't go so fast there. I want to do a little thinking here, Mr. Woods?

A. Making a total of 24 cents.

Q. What did you say about the allied companies?

A. I said on my calculations I added one cent to make an average condition throughout the city, as to 16742
the average conditions.

Q. To even up the system, is that right?

A. I said covering the average conditions throughout the city it would be 24 cents.

By the Master:

Q. How did I get 15 cents when you testified before? Where did I get that, excluding commercial and general expenses?

A. I don't know where you got it, your Honor.

Q. Well, how did you make up your 19 cents?

A. 19 cents is made up of these items with 5 cents deducted on the expense of the appliance business. I made up the 24 cents less 5 cents for appliance busi- 16743
ness.

Q. Well, now, the first item of two cents was what?

A. Superintendence street department, shops, supplies expenses and sundries of two cents.

Q. All right. That applies to what I am getting at. Now, what was the 1 1/4 cent item?

A. Meter and installation work, setting meters, jobbing and sundries.

Q. The next two cents?

A. Work on consumers' premises, setting appliances, burner work, jobbing.

Q. And the four cents was repairs to mains?

A. Mains and services, meters and appliances and miscellaneous repairs.

Q. Your testimony is that what you know about are those four items aggregating 9 1/4 cents, isn't it?

A. 9 1/4 cents, your Honor.

Q. The rest of it has to do with the commercial department?

A. Commercial and general office expense.

Q. Meters and office expense and things of that sort?

16745 A. That is right.

Q. So that your testimony, so far as you know anything about it, runs to 9 1/4 cents?

A. That is right, plus the renewals and replacements.

Q. Yes, I mean of this 19 cent item?

A. That is as far as you permitted me to testify, your Honor.

Mr. Ransom: I don't think that is quite an accurate statement.

Mr. Chambers: Your Honor excluded all that cost of distribution when I was examining.

Mr. Ransom: Oh, no.

16746 The Master: Oh, no.

Mr. Chambers: Renewals and replacements you let him testify.

The Master: Yes, but you brought out somewhere, or it came out somewhere, that there were some items in the 19 cents that he seemed to know something about, but to be perfectly frank with you, I take his testimony—give his testimony on this whole item, even what I have heard something about, very little weight, if any.

Mr. Ransom: I don't quite see how that is

warranted, because with respect to about nine of those items, he has a very great deal to do, and the items regarding which you permitted him to testify are distribution, superintendence, supplies and expenses, meter and installation work, work on consumers' premises, repairs on street mains, repairs on services, repairs on meters, repairs on branches, street departments, shops and so forth, tools, repairs to gas appliances, public street lighting.

The Master: Well, what I said stands. I took his testimony on those points. I have in 16748
mind that his calculations must necessarily be based upon book entries, and in the nature of things he could not calculate those things himself without regard to book entries, as he could the amount of labor employed to make gas. I do not give it as much weight as I do the other, and that is all there is about it.

Mr. Chambers: I want to say I refrained from asking any questions about it, because I understood it was excluded, and there are a lot of questions about that that I would have asked otherwise.

The Master: I forget just how it came up, 16749
but I know there was some suggestion.

Mr. Ransom: On the contrary, I asked on direct regarding each of those items to which I have referred, and he was cross-examined regarding the most of them.

Mr. Chambers: You are mistaken. I did not cross-examine him.

The Master: We will take up the question as to whether you are to have any further cross when Mr. O'Brien gets through. You can examine him on all of these items making up this 9¼ cents.

Q. Just give me that 9¼ cents, Mr. Woods?

The Master: No, he has given it three times. You have it on the sheet there?

The Witness: Yes, sir, this is the memorandum.

The Master: Just hand that to Mr. O'Brien.

Mr. Ransom: I object.

The Master: Let Mr. O'Brien have it. I have refused to let the witness repeat it. It is there in tabulated form, and Mr. O'Brien ought to have it for convenience.

16751 Q. You have handed me the paper from which you have just read off the various items making up nineteen cents, or twenty-four cents for distribution, haven't you?

A. That's right.

Q. Now, before I asked you about this nine cents, will you tell me who told you to set up all these various expenses and call them cost of distribution?

Mr. Ransom: I object to the question. The Public Service Commission did that in their uniform system of accounts.

The Master: Well, I think your statement is highly improper. I think Mr. O'Brien is entitled to an answer to his question. Who told you to set that up this way?

16752

The Witness: I was not told by any one. I looked at the accounts that go into distribution.

Q. Did Mr. Teele when he made up his expenses for the cost of making gas for 1919 and 1918, have the same elements in his items of cost to distribution?

Mr. Ransom: I object to that as an improper question.

The Master: Objection sustained.

Mr. O'Brien: Look at it, your Honor, at the comparison there.

The Master: I don't care.

Mr. O'Brien: If they are going to use one term one minute and another term another, we ought to know it.

The Master: I am going to let this witness tell you what Teele did.

Q. Did counsel tell you to set it up that way?

A. They did not.

Q. Did Mr. Carter tell you to set up these items?

A. He did not.

Q. Have you figured out any place on this Exhibit 354, unaccounted for gas? 16754

A. Yes.

Q. What part of the schedule is it?

The Master: You are referring to 354?

Mr. O'Brien: Yes.

The Master: Of course it is right there. Exhibit 354 for identification gives as the cost of gas manufactured, .5306, and as the cost per thousand cubic foot of gas sold, .5705.

Q. Is that what that figure means?

A. It does.

Q. It means the price that you got for the gas, or the cost of all the gas that is made?

The Master: Objection sustained. 16755

Mr. O'Brien: Exception.

Q. What quantity of gas did that contemplate?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Is the unaccounted for gas which is represented in the difference between the item "Cost of Manufacture," and "Cost per Thousand Cubic Foot Sold," based upon some uniform percentage?

Mr. Ransom: Objected to it has been fully and exhaustively covered.

The Master: Objection sustained.

Mr. O'Brien: Exception. Your Honor, I want to find out how he reduced this to cents per thousand cubic feet.

The Master: He has told you about it long ago.

Mr. O'Brien: I don't recall that in Mr. Chambers' examination he gave any such explanation.

The Master: Well, it is on the record. For your satisfaction, because it will only take a minute, I will ask him.

16757 Q. What percentage of unaccounted for gas did you take in getting the cost of gas sold here?

The Witness: Seven per cent.

The Master: Now, I will not let you ask another question. I knew it was in the record a dozen times. I knew it was seven per cent. Three per cent he figures for slow meters, my recollection is.

The Witness: Three per cent of the seven.

The Master: Three per cent for slow meters?

The Witness: And the balance for condensation, difference in temperature, etc.

16758 Q. Does this item under distribution of two cents covering superintendence of Street Department, shops, supplies, and expenses and sundries include such salaries as Mr. Simpson's?

A. It does.

Q. The whole of it?

A. No.

Q. Does it include any part of your salary?

A. The distribution? Part of it.

Q. Does that include a part of the salary of all the officers?

A. It would.

By the Master:

Q. Would that two cents—

A. No, that would not be in there.

Mr. Ransom: Not in that part of the distribution?

A. I thought he was talking about the general distribution, the nineteen cents.

Q. It is either in the 6½ or the 7¼, it is not in the two cents.

A. No.

Q. All I am interested in now is that two cent item. Is it in the 1¼? 16760

A. It is not.

Q. Or in the second two cents?

A. No.

Q. Or in the four cents?

A. No.

By Mr. O'Brien:

Q. Where did you get your figures in which you included the item of two cents just referred to on supplies?

A. Supplies?

Q. Yes.

A. An analysis of figures, and my knowledge what supplies were, an analysis of the record as to how much it would amount to. 16761

Q. What part of the two cents did you attribute to that?

A. It is indicated there somewhere; I don't recall the figures.

Q. There is a "Ten per cent" in blue ink over "Supplies"?

A. Ten per cent would be indicated on supplies.

Q. Does that mean ten per cent of the two cents?

A. Right.

Q. How did you work that out? Is that an arbi-

trary figure that you have had in mind for a number of years? How did you get that idea so you could apply it to the present time and present prices?

A. From my knowledge and experience, knowledge of prices, and based upon prices as of to-day. That would vary from time to time.

Q. What did you consider would make that up? Did you start with any figure of last year? What known factor did you have in mind in computing that part of the two cents?

A. From analysis of figures I knew about what
16763 it was.

Q. What figure did you start from?

A. I don't recall what figure.

Q. Did you take a figure that you knew of some years ago?

A. No, I did not.

Q. And add to it because of the present day charges?

A. I did not.

Q. Have you got in your mind a special figure that represents in cents per thousand cubic foot made the supplies that are used in repair?

A. In repair?

16764 Q. Supplies that are used in distribution?

A. I have testified there that those repairs in that particular account, in the superintendence, et cetera, which is in connection with superintendence of shops, street main department, and the offices, and other supplies, amounted to that much money.

Q. Where did you get it, how did you reduce that to cents per thousand cubic feet made? Didn't you have to take some output at some plant to figure it?

A. Not necessarily.

Q. How did you do it then?

A. From an analysis of figures.

Q. What are the figures that you analyzed?

A. An analysis of the records as to the expenditures, and my knowledge and experience as to the amount of money the company was spending. From that I arrived at that figure.

Q. Mr. Woods, you are dealing with present prices?

A. Yes.

Q. And you would have to know what they are?

A. In a general way.

Q. And you would have to know in a general way, at least, what the kind of articles were supplied? 16766

A. Yes, to a certain extent.

Q. And then you would have to figure out the prices, if it was mains for repair purposes, if it was lead or jute, you would have to know the present day prices, wouldn't you? If it was lanterns, and all the other incidentals that would enter into street work, you would have to know the present prices, would you not?

A. Yes.

Q. So that that might form the basis of your figure?

A. Yes.

Q. Just tell me whether you took this roughly, 16767
because it was a small amount, adding on a little to what you knew generally to be that amount, or how did you do it?

A. I based it upon an analysis of the record of which I had made an examination based upon my knowledge, et cetera. I didn't go into the prices of this, that and the other thing; I knew how much money had been spent by the company and knew the prices of labor and material, and knew that the cost would approximate that much year in and year out, under

the present conditions. I did not try to segregate each separate amount.

Q. Did you take the total amount that had been incurred this year, and then reduce that to per thousand cubic feet made by taking the output of the complainant company?

A. The output would not enter into the expenditure. We have to spend a little more money than a smaller company would.

By Mr. O'Brien:

Q. Did it?

16769 A. These things were taken into consideration.

Q. Tell me what things were taken into consideration when you made the computation, and if you took an arbitrary figure, what was it?

A. I had many figures before me.

Q. What was the total amount of money that you allowed for a given amount of gas produced, that you used to make up this figure?

A. I do not recall the exact amount of money. I can give you the amount of money in 1912—

Q. Did some one hand you Mr. Teele's exhibit?

A. No, I didn't look at Mr. Teele's exhibit.

Q. Did some one hand you any figures that Teele

16770 used to give you this figure?

A. I don't know what figures Teele used.

Q. Did the accounting department furnish you this figure?

A. It did not. I may have gotten figures from the accounting department in connection with it.

Q. Why don't you come out and say it?

A. I have said that I have examined accounts and figures and reports to which I had access, and I made an examination—

Q. That is what I want to find out. Have you got the data with you that you used?

A. No, I haven't got the data with me.

Q. Why didn't you bring it in here?

Mr. Ransom: If you want it, ask him for it.

A. I haven't the data with me that I used.

Q. Who handed you the paper you have in your hands now?

A. I handed it to myself.

Q. Does that refresh your memory?

A. No, it does not refresh my memory to any extent, except that of course, I can tell you how much money was spent on these different things.

Q. Now, to make a figure for September, 1919 16772
that would reflect the then market prices of supplies, wouldn't it be necessary to have the market prices as to that item?

A. Yes, it would be necessary to find out what the prices were, as compared with the previous time.

Q. Did you consider this such a small amount comparatively speaking, that it was not necessary to go very far into detail on it?

A. What I considered was that on those items of two cents per thousand cubic feet, it was what it would cost to perform that work.

Q. Tell me what you did; did you have the total amount spent upon supplies in the distribution depart- 16773
ment for the month of 1909, ending in September?

A. I don't recall. I may have had the figures. I had a lot of figures before me.

Q. Did you take only the figures of the month of September or the month of August?

A. I did not.

Q. Tell me then, what figures you had before you.

A. These items would vary from time to time at different periods of the year. The average of two cents would cover a year's period, and not one month. It might be more in one month, and it might be less in another month.

16774

Q. Are we to assume that the figures for September, 1919 cover a period of a year and reflect the average prices for the preceeding year?

A. No, the price of two cents would reflect the condition under which we are operating as of to-day. You will find that for the year's operation it will have cost that much money, based on present conditions.

Q. Where there were supplies included in this item of two cents, supplies that were not used lately what did you do in that case?

A. They might not be used immediately, but they

16775 might be used a month hence. You can't sit down and figure the supplies you are using as of the day and the amount of money that is going to give you the rate per thousand cubic feet for the year. One year may vary a little from another.

Q. Does this item of supplies include the stationery of the superintendence shop?

A. It would take the superintendents of shops, yes.

Q. Did you have before you the cost of the stationery this year?

A. I had in mind everything that would make up the amount of two cents which would cover all these

16776 items under that distribution, superintendence, supplies and expenses.

The Master: I don't think I will allow any further questions on that. We have spent all the time that is necessary.

Mr. O'Brien: Your Honor sees the futility of this.

The Master: You have shown all you can show.

Q. What do you mean by sundries here where you classify them in this two cents?

A. Sundry items.

Q. How much of this item of two cents includes overhead expense?

A. What overhead expense? It is indicated there, you have the segregations there as to distribution.

Q. You have this two cents here under distribution divided into superintendents, street department, 30 per cent, shops 40 per cent, supplies 10 per cent, and 19 per cent— you have got supplies and expense— supplies 10 per cent and expense 19 per cent. What does that mean; what is the 19 per cent for expense?

A. Miscellaneous expense in connection with that operation. 16778

Q. 19 per cent for miscellaneous?

A. Whatever the amount is there.

Q. Then you have 1 per cent for sundries. Have you in mind just what those things would include?

A. I do not recall the items now. I have not the details with me as I did when I worked that up.

Q. Could you give the Court in any kind of terms, general or specific, any idea of just how—

A. I do not recall just how that expense item is made up. I have told you how it was made up.

Q. Can you give the Court any description of just how you made up that figure of 2 cents?

The Master: Do not spend any more time on this. I should like to have you ask the witness one question—or I will ask him, which is the quickest way. 16779

By the Master:

Q. Mr. Woods, in this paper that you have been using for your testimony you have indicated the percentage of the total item which you have set up against the particular subitems, have you not?

A. Yes.

Q. For instance, as Mr. O'Brien has pointed out, under distribution you have put up 30 per cent against

16780 George E. Woods, Cross.

superintendents street department, 40 per cent against the shops, and so on?

A. Right.

Q. I am going to ask you then—Mr. O'Brien has covered the distribution—

Mr. O'Brien: You mean the superintendents?

The Master: I am going to cover this whole thing in a sentence or two and I am going to stop the cross-examination and I will tell you why.

Mr. O'Brien: This is where this case will be won or lost, right here.

16781 The Master: I am going to tell you why I do it.

Q. Meter installation work 1 1/4 cents, and you say 15 per cent is for setting meters?

A. Right.

Q. 18 per cent for jobbing and 2 per cent for sundries; is that right?

A. Whatever is indicated there. I do not recall the figures.

Q. Yes, I am reading from this paper.

A. Yes, that is right.

Q. Work on consumers' premises, 2 cents, you subdivide in the following manner: 67 per cent for

16782 setting appliances?

A. Right.

Q. 1 per cent for burner work?

A. Right.

Q. 29 per cent for jobbing?

A. Right.

Q. 3 per cent for sundries?

A. Right.

Q. And the repairs you subdivide: 22 per cent for mains, 11 per cent for services, 43 per cent for meters, 16 per cent for appliances and 8 per cent miscellaneous repairs, is that correct?

A. That is right.

Q. I take it that you have set up those figures based upon what you contend has been your experience?

A. That is right.

Q. And in the light of the figures you have seen in the books of the company?

A. That is right.

The Master: I am not going to permit any further questions for this reason, Mr. O'Brien: If you were to spend a day on this thing all that you would get is what you have gotten with reference to one or two items. This witness has taken figures that he finds on the books. He has 16784
in mind the general character of work that is required, the general proportion of one work with reference to another. When you get all through with it you will not have any more than you have now.

So far as I am concerned, so you will know how much weight I give to his testimony, I will tell you that I give only this weight, that based upon the actual operating figures with which he is familiar he says what is his judgment. If his judgment is not in accord with actual operating results that I am convinced are correct and on which I rely, I absolutely ignore his testimony. 16785
In fact this testimony, as far as that is concerned, carries very little weight with me.

As I have said time and again since Mr. Woods' cross-examination started, his testimony is important to me as an operating expert when he says I use 200 pounds of coal for a thousand feet of gas, that I use so much oil, that I get so much in residuals. So that I can, based upon the quantities of materials—not prices or anything else—approximate in some form independently of books or other records what it ought to mean in fig-

ures. As we all agree, the coal, the oil and the labor are the three big items involved in the making of gas, and the big item to locate with reference to this case is the cost of production. Of course, the other items are important, but the big item is the cost of production and that is where the coal and oil and labor come in.

What I am interested in mainly as far as Mr. Woods is concerned is his testimony under oath based upon many years of experience, year in and year out, on a safe basis of calculation, of
16787 so much oil, so much coal, so much labor. That is all his testimony, when it is analyzed down, leaves in my mind. I have practically discarded all that I have heard for days. It is the big things that I have left in my mind, which are the items that he gives when he says I use 200 pounds of coal, of bituminous, I have used 200 pounds of anthracite with this breeze that he talked about, and I use two cents of labor to handle it and I have figured that out.

Now, I have taken those figures subject, of course, to other proof or correction. I do not take any one item standing by itself. I want to
16788 check it from every possible standpoint. When he says he will get 100 pounds of coke and breeze out of every 200 pounds of coal used, I take his statement as an expert, having again in mind that I will check it in two or three different directions before I get through.

Mr. O'Brien: You must have there in mind that they did not set up the amount in dollars and cents. They camouflaged on the amount of coke and breeze used under the boiler, and when I—

The Master: Do you understand what I mean?

Mr. O'Brien: I am driving now at what I drove at this morning, and what I asked you to help me get out of that witness was enough to help me make two or three cents a thousand cubic feet.

The Master: I have tried to make it clear to you that I will not take this witness's or any other witness's statement for any fact without an analysis and a very careful checking up against other sources of information that I may have or that may be in this case before we get through. I take his statement that he gets 1.2 gallons of 16790
coal tar, subject again to further checking, examination and analysis. But when he gets down to the cost of repair labor, repair material, miscellaneous works expense, all of which must in the nature of things depend very largely upon the analysis of operating revenue and operating figures, his testimony is not important enough to waste a lot of time in cross-examination. That is what I am trying to get clear to you.

Mr. O'Brien: Of course, if we knew that the record would indicate that, why, you would not waste so much time, but here is an idea, your Honor, that it comes in here— this may be the 16791
only time we have in this case to get right into the actual cost of operation. As I said to your Honor when I first started these papers, I felt they would only put up this stuffed man so that we would be wrestling with that instead of tackling the actual costs and showing how they are incorrect.

The Master: Mr. O'Brien, I have tried in every possible way to give you the way my mind is working. I have tried to indicate to you where you can be of any service to me on cross-exam-

ination. Now you will have to ask your questions and I will rule on them. I told you now I am not going to let you spend any more on those, and I will not.

Mr. O'Brien: I thought maybe I could ask a question that would sum up practically what you said.

The Master: What is the use asking it when I have summed it up myself?

By Mr. O'Brien:

Q. There are various items here that make up the
16793 nine cents, Mr. Woods, that have certain percentages set over them, and if I were to continue the cross-examination of you with regard to the data that you worked from, the concrete figures, if any, that you predicated these percentages on in order to reflect in cents per thousand cubic feet of gas made the present day prices of labor and material, would your answers be just the same as the answers that you have given with regard to the analysis of the two cents?

A. They were.

Q. Substantially the same?

A. They would.

Q. You would not clarify it any more than you have
16794 done?

Mr. Ransom: Objected to.

The Master: I would not say whether it is clarified or not. He has told you his answers would be the same. Mr. Chambers, did you hear the speech made a few moments ago to Mr. O'Brien?

Mr. Chambers: No, I did not.

The Master: I made it to you just as much as to Mr. O'Brien. I will tell you now that you better not waste further time asking questions, because I will say it has been covered.

Mr. Chambers: I have some questions with regard to distribution that have not been covered.

The Master: I said in substance this: Not to waste any time about the distribution evidence by this witness.

Mr. O'Brien: Well, what you said applies to gas making labor, your Honor, and repair labor, as I understood your statement.

The Master: Yes.

Mr. Chambers: Then I can leave that out, but my questions relate to another phase of the situation. 16796

Mr. Ransom: Do I understand that your Honor's ruling is adverse to this witness's detailed testimony?

The Master: No, it is not. Can you not understand that I have got to take this witness's statements—

Mr. Ransom: In the light of all the evidence.

The Master: That the cross-examination is not going to do any good, that I can see perfectly well and clearly how he gets these figures; that if there was nothing else in this case but these figures I would not take them at all. But I will take them as a basis of finding out from other sources 16797 whether his conclusions are right. That is all. It is in the case, but what I am trying to make clear to counsel is not to waste time cross-examining.

Mr. O'Brien: Well, they have set up a stuffed man to occupy our attention with.

The Master: He is probably a very tired man.

Mr. O'Brien: I do not mean the witness; I mean Mr. Coal-Gas Costs and Mr. Water-Gas Costs.

The Master: When this case is finished I am

going to make a finding on evidence on which we can rely as to just what it costs to make and distribute gas, as far as it is humanly possible to determine it, and if there is not any evidence in the case I will say so. I am trying to tell you gentlemen as we go along how my mind works and how I am weighing evidence. It is perfectly easy for me to sit here like a stuffed image and and let you ask questions to the end of time, and then when I get through say "I did not pay much attention to Mr. Woods' testimony about these
16799 things: what I really did was to go to other sources of information: I figured it out in two or three different ways, and when I figured it in two or three different ways I find that it costs just six cents for the repair labor, and when I looked at Mr. Woods' figures I found that is just about what he figured it at," or I find that it is or it is not, it is more or less. I am going to take his figures as a working basis that is all.

Mr. O'Brien: Will your Honor bear with me one minute?

The Master: The trouble is you will take an hour.

16800 Mr. O'Brien: He has got six cents down in his estimate as the cost of making coal gas—

The Master: Yes, and it does not prove it at all.

Mr. O'Brien: For repair material, and how in the world are we going to use his testimony as the basis of the worth of other testimony on actual operations if his structure is built on sand and if we do not know where he got the figures?

The Master: He has told you where he got the figures.

Mr. O'Brien: He has not given us—

The Master: He has given it to Mr. Chambers in detail.

Mr. O'Brien: He has not told us the price he paid for them. I will first ask that this paper be marked for identification before I proceed.

The Master: What paper is that?

Mr. O'Brien: The paper showing these percentages of nine cents.

The Master: It is all spread on the record. Why do you want it marked for identification? I read it off.

Mr. Ransom: It is all read in. 16802

Mr. Chambers: Is that a new paper?

The Master: It is a memorandum Mr. Woods has refreshing his recollection, and to cut the testimony short I asked a question incorporating all that he had there.

Mr. Chambers: Then it is already in the record?

The Master: It is all in the record. Get to water gas and find out whether he is right about the statement that he used that much oil.

Mr. O'Brien: I would like to have this witness for about fifteen or twenty minutes in reference to that coke and breeze under the boiler, your 16803
Honor. If you get to that you will clear up about three cents in the making of coal gas.

By Mr. O'Brien:

Q. On the cost of making coal gas, Mr. Woods, is there under any one of the items there included, any interest on investment in any form or shape?

A. There is not.

Q. It is not put in under the shape of rental of facilities?

Mr. Ransom: Objection.

16804 George E. Woods, Cross.

The Master: Objection sustained. He has answered.

Q. Wherever materials figure in any of the items on this schedule of coal gas cost, do you take them from the purchasing department?

Mr. Ransom: Objected to.

The Master: Objection sustained; covered by Mr. Chambers.

Mr. O'Brien: Exception.

Q. On what did you predicate, in Exhibit 353, the item of 32 1/2 pounds of anthracite coal in the gener-

16805 ators?

A. Based upon my knowledge and experience of the operations of the Consolidated and its affiliated companies, under conditions of which we are operating, of 32 1/2 pounds.

Q. Was it the same last year?

A. It varies from time to time.

Q. The quantity varies, too?

A. It does.

Q. What would have been your estimate last year, if you were asked how much generator coal was used?

A. 32 1/2 pounds.

16806 Q. 32 1/2?

A. Yes, sir.

Q. This is all anthracite coal you are speaking of?

A. It is on an anthracite basis or its equivalent.

Q. Anthracite or its equivalent. Now, would it have been the same in 1917 and the preceding years to 1906?

A. No, it might have been different; probably was a little different.

Q. Would it be different if your water gas plant was being run with a coal gas plant?

A. No.

Q. Wouldn't there be less breeze?

A. This is on an anthracite coal basis.

Q. You would use coke instead of coal in that instance, wouldn't you?

A. We would.

Q. And would you charge—what price per pound would you charge for the coke?

A. Based on the price of anthracite coal.

Q. And what formula do you use for it?

A. The formula would be based upon many things to be taken into consideration, that I described before.

Q. What is the relative efficiency of a pound of coke and a pound of anthracite coal? 16808

Mr. Ransom: Objected to. It has been very fully covered.

The Master: Yes, that has been covered. I will sustain it.

Mr. O'Brien: Well, your Honor, but skirting in between and passing over and trying to keep away from just the form of question asked by Brother Chambers is a mighty difficult thing.

The Master: I know it is; that is why I let you go on.

Mr. O'Brien: It will break up the thread of my examination and the thread of the witness's answers, there would be no continuity of his thought or mine in the record, and I submit some latitude should be allowed. 16809

The Master: I have tried to give you some latitude. I will allow this one question. Go ahead.

Mr. Ransom: Exception.

A. As I explained before, it is a question of handling cost that enters into it. It costs more to handle coke; the breakdown is greater, there is a greater loss.

Q. I am talking about the efficiency of a pound of anthracite coal and a pound of coke.

16810 George E. Woods, Cross.

A. I am trying to give it. You asked me what I based my price on, anthracite coal or coke?

Q. I did not say anything about price.

A. It would depend on the character of the coke, as to what the price would be.

Q. Well, take the best coke and the best anthracite that you have ever seen in the world in a gas shop.

Mr. Ransom: What is the question?

(The question was read as follows):

"Q. What is the relative efficiency of a pound of coke and a pound of anthracite coal, taking the best coke and the best anthracite that you ever saw in the
16811 world, in a gas shop?"

A. With gas house coke you will use, under normal conditions where it must be handled to any extent, you will use from five to eight or ten per cent more than you will with a good grade of anthracite coal, gas house coal. At times it will run higher than that. It depends upon the quality of the coke and the kind of clinkering it will make, and it varies from time to time, but it will require more gas house coal to make a thousand cubic feet of gas than it will a good grade of anthracite coal.

Q. Well, would you say ten per cent more coke than coal, under ordinary conditions, assuming that the
16812 coke is of excellent quality, and the anthracite is of excellent quality?

A. In 1918 we used 35.23 of coke, and the Consolidated stations using nearly all coal, used 32.83. The coke was 35.23 for the year 1918. It will vary for anthracite coal. For the first eight months this year we used 33.74 pounds which, however, included ten pounds of coke and 22 pounds of anthracite coal, making 33.25. And on all coke we used 36.43 pounds. The average of all the companies using a mixture of coal and coke for the eight months of this year was 34.15 pounds, and the average for the year 1918

of the companies, Mutual, Standard, New Amsterdam and Astoria was 33.53 pounds, 7.76 pounds being coke and 25.77 being coal.

Mr. O'Brien: I move to strike the answer out as not responsive. Your Honor, I asked for a definite answer. That is just the way the witness has been going ever since I undertook to question him. I asked him a definite question as to the relative efficiency.

The Master: What is the use of granting your motion to strike it out?

Mr. O'Brien: I want the record. 16814

The Master: Well, you are getting it.

Mr. O'Brien: I don't want him to lapse off. I have got to take up all of these figures and ask him about them, or leave it untouched, and have the counsel state there is the record in the case as to the coal used.

The Master: Take up the figures and ask him.

Mr. O'Brien: As to the relative efficiency of a pound of coke and a pound of coal.

The Master: He answered that very elaborately. First he said about 10 per cent, and then you followed it up with another question, and he has given a very elaborate answer. Now, 16815
you will have to follow it up if you want to.

Q. Who prepared that memorandum from which you just read?

A. I did.

Q. From what figures did you prepare it?

Mr. Ransom: I object to counsel demanding and taking possession of the witness's personal papers.

The Master: Oh, I will let him have it.

Mr. Ransom: I submit that that is not a fair or proper procedure.

16816 George E. Woods, Cross.

The Master: I will rule that it is.

Mr. Ransom: I most emphatically protest against it.

The Master: Well, your most emphatic protest will be denied.

Mr. Ransom: This witness is entitled to have papers to refresh his recollection.

The Master: Yes, and counsel are entitled to examine them.

Mr. Ransom: And he is not entitled to have them taken away from him by counsel for the
16817 defendant Edward Swann.

The Master: Go on, you have the papers. Ask him the next question. You are entitled to have a paper the witness refers to.

Mr. Ransom: I ask that these be marked for identification now to show that they have been physically taken by the counsel for the defendant Swann.

The Master: Ask your question. I won't stop to have them marked now.

Q. Mr. Woods, you have handed me two cards, one entitled "Generator fuel for year 1918," another "Generator fuel for eight months 1919." I will ask you in
16818 whose handwriting these cards are?

Mr. Ransom: I object as improper and impertinent question.

The Master: The question is allowed.

Mr. Ransom: Exception.

A. They were made by me. The handwriting is Mr. Viebrock or Mr. Rogers, I have forgotten which.

Q. You don't know which it is?

A. No, I am not quite sure. It was got up by either one of those. I had them made up—they were made up—I had them made up.

Q. I did not ask you that.

George E. Woods, Cross. 16819

The Master: Just answer the question. Whose handwriting is it?

A. Either Mr. Viebrock or Mr. Rogers, I am not sure which.

Q. Did you tell them to get it up?

A. I got it up with them.

Q. Where did you get it?

A. In my department.

Q. Where did you find the figures representing "Made" at the several stations of the several companies?

A. In my department. 16820

Q. In what books?

A. In the engineers' monthly reports.

Q. All the engineers of the several companies, Astoria, New Amsterdam, Standard, Mutual, 99th Street and 21st Street turn in monthly reports to you?

A. Yes. I had access to those figures.

Q. Do they turn them in to you?

A. They are turned in to my department.

Q. Will they turn them in to you?

Mr. Ransom: I object to the question, the question whether they are sent to the chief engineer or the acting chief engineer or the assistant chief engineer.

The Master: I will allow it. 16821

A. I am assistant of the Engineering Department, and I have access to them all the while.

Q. Do you know whether these are the readings of the meters, the combined readings of the meters of the stations and companies mentioned there for the periods mentioned?

A. That was the make of gas as recorded on those sheets.

Q. You have assumed Mr. Viebrock and Mr. Rogers went to some records and took out this make, have you?

16822 George E. Woods, Cross.

A. I was there and made the records with them and went through the books.

Mr. Ransom: I call your Honor's attention to the fact that counsel is now interrogating him on different matters from those for which he took these papers away from the witness.

Q. Will you state where Mr. Viebrock and Mr. Rogers derived the figure showing coal in tons?

A. On the engineering records.

Q. Did they take them from the manufacturing books of the several stations?

16823 A. No. They were taken from the monthly engineering records.

Q. Of the companies mentioned and the stations of the complainant?

A. Right.

Q. Is that a reproduction of the manufacturing books that we have referred to in your previous testimony?

Mr. Ransom: Objected to as incompetent and immaterial.

The Master: I will allow it.

A. Yes.

Q. So that if we turned to the 21st Street station

16824 records for 1918, we would find the figure here, the same figure, for coal in tons?

A. If you took all of the eight or twelve months and added them together.

Q. Will you turn to the manufacturing book for the 99th Street station and tell us what quantity of anthracite that shows for the year 1918?

Mr. Ransom: I object as incompetent.

The Master: Objection sustained.

Mr. O'Brien: I want to call his attention to the manufacturing book and ask him to compute the amounts of coal there.

The Master: I won't permit it. I knew that was what you were going to do, that is why I told the witness to keep his seat for a while. You compute it and show me afterwards by argument that it does not bear it out. I will not let the witness do any computations here.

Q. When you read off a minute ago the figures showing pounds of generator fuel you used in 21st Street station, it was predicated upon a total used of 95,311.64 pounds?

A. I will have to refer to the memorandum. 95,311.64 tons and 2,510.71 tons of coke. 16826

The Master: The answer is yes.

The Witness: Yes.

The Master: Next question.

Q. Who made these computations upon these two cards?

The Master: I think he has answered that.

Mr. Ransom: Objected to.

The Master: Viebrock and Rogers and himself, is that correct?

The Witness: Yes.

Q. Have you ever inspected the books of the Mutual Company, the Standard, the New Amsterdam or the Astoria?

A. The engineering reports of the Mutual. I examined the Standard books and the Astoria books. 16827

Q. Well, what I mean, you have never gone into the question as to what they actually used, and what coal was delivered to them and how much coke was delivered to them, and what they paid for it?

A. I have gone into their deliveries, yes, the kind of coal they received, the coal or coke.

Q. Well, I mean outside the cursory interview of the book, you do not make it a practice of checking up through some inspector under you the fuel used by these other companies, do you?

16828 George E. Woods, Cross.

Mr. Ransom: Objection to the question.

The Master: I will allow it.

A. I know; I don't need an inspector.

Q. Are you an officer of each one of these other companies?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Does your official work—

Mr. O'Brien: I know he spoke about several of the companies, but whether he took them all

16829 or not—

The Master: He has told us what his office is and what his work is as to all of these companies, and I won't let you go over it again. I get your point that he don't know how much coal was delivered to any of these companies.

Mr. O'Brien: Yes, he has simply taken these figures.

The Master: Yes. Ask him the question, you don't know how much coal.

Q. You don't know how much coal was delivered or actually used by these companies, do you?

The Master: Except as these reports show?

16830 Q. Except as the reports show?

A. Except by the records, I did not actually see the coal.

Q. Except by the records which have been brought to you by Viebrock and Rogers, you don't know what coal was used or what was delivered to them, do you?

A. The reports are sent in not to Viebrock and Rogers, but to the engineering department, and Viebrock and Rogers are clerks in the engineering department.

Q. Well, beyond the fact that these reports are produced for you and these figures worked out by them

from sources that you knew of, you don't know their correctness by personal inspection of your own?

A. I firmly believe they are correct.

Q. But you don't know it by personal inspection of your own, or of your personal knowledge?

A. You mean as to making calculations of their own books? No, I never did.

The Master: Well, what will you say as to whether these results are in accord with the results of your own experience?

The Witness: I should say those results are correct, your Honor. 16832

The Master: And in line with your own actual experience?

The Witness: That is right.

Q. Would you say that the relative efficiency of coal and coke would be expressed by a difference of 10 per cent in favor of the coal?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. (Continuing.) In the face of the figures here, showing the relative amounts of coal and coke used?

The Master: Objection sustained. Let me see that, will you?

Mr. O'Brien: I have got an unanswered question yet, that is as to the relative efficiency of a pound of coal and a pound of coke. 16833

The Master: I will rule that he has answered.

Mr. O'Brien: He has not answered anything, your Honor. He has given us a lot of figures, and now, come to find out, I want to know how he deducted the proposition that the relative efficiency of coal and coke would be like 110 to 100 from the figures on these two tickets.

The Master: I shall rule out any further questions.

16834 George E. Woods, Cross.

Q. You set forth here at the price of $8.26 a gross ton, the generator fuel at .1198 cents. Now, if you used 10 per cent more coke than coal, or as you say 35.23 pounds per thousand, at the same price per gross ton as you used in the coal gas cost, how much difference per thousand cubic feet of gas would this make from what you gave here, .1198?

The Master: Isn't that a matter of calculation? It is just a matter of calculation, isn't it? Objection sustained.

Q. Is there a relative advantage in using coal over
16835 coke, or coke over coal?

Mr. Ransom: Objected to, that has been repeatedly gone into.

The Master: I think so.

Mr. O'Brien: Exception.

Q. Couldn't you use entirely coke in the making of gas and no coal?

A. Yes.

Q. Assuming you had the supply, of course?

A. Yes.

Q. And the efficiency would be just as good? I don't mean that coke would produce the same result in a given quantity as the coal.

16836 The Master: Would it be just as good if you used enough coke?

A. If you used enough coke, yes, but it would make a difference in the oil, and it would make a difference in the labor. The ultimate results eventually would be the same. It would affect the capacity of your plant, but you can make gas out of coke.

Mr. O'Brien: Won't your Honor permit me to put that little calculation to him? I want to show you on the record something for your own sake that we would have to deduce afterwards in the shape of a memorandum.

The Master: No.

Q. So that, Mr. Woods, if you used coke at $6.34 a ton, instead of as you do in making coal gas, you would save the difference between that and $8.26?

The Master: Objection sustained. The witness has given you a lot of varying factors in it that make a difference, the amount of oil and the rest of it.

Q. Going back to these figures that are set forth on the two cards that you used to refresh your memory, showing figures of coal in tons per thousand cubic feet, coke in tons per thousand cubic feet, total tons, and then pounds of generator fuel per thousand cubic 16838
feet, will you tell me how you deduce the proposition that the relative efficiency of coke and coal per pound is as 110 to 100?

The Master: I have ruled that out three times, Mr. O'Brien.

Mr. O'Brien: I will not persist. I want to put it clearly and get your ruling. I will ask that these be marked for identification. Counsel for complainant made that request.

Mr. Ransom: I asked that they be marked in evidence.

The Master: They are received in evidence. having been used by the defendants as part of 16839
the cross-examination.

Mr. O'Brien: I note an exception to their being received in evidence.

The Master: I have warned you three or four times that when you call on a witness to give you his memoranda, and use it for cross-examination, it is in evidence.

Cards received in evidence and marked Complainant's Exhibits 360 and 361.

Q. Mr. Woods, did you state a minute ago that it took more labor and more oil to make water gas out of coke than out of coal?

Mr. Ransom: Objected to.

The Master: Objection sustained. He has told us about it, that it requires more men. It makes more breakage, it requires more oil.

Q. Does it take more oil?

The Master: Bring some other witness and show that he is not telling the truth. That is his claim.

Q. For what reasons does it require more oil?

The Master: I will sustain it on the further ground that I don't care at this time whether you
16841 can save a quarter of a cent or seventeen twenty-sixths of a cent, making it altogether out of coke.

Q. Has the complainant's company ever taken up the question of the saving that might be made in the making of gas by a coke oven system?

Mr. Ransom: Objected to.

The Master: I was just going to let him say whether they had or had not.

A. The question of coke oven plants has been under consideration.

The Master: That is all.

Q. Did you make any investigation into that matter for the company?

16842 Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: I submit, your Honor, that it is incumbent upon the plaintiff to show that they adopted the most economical and efficient method of making gas. If there is any other way of making gas for a lesser cost, they would have to engage in it.

The Master: Objection sustained.

Mr. Ransom: The company is not obliged to go into some other business in order—

The Master: Objection sustained.

Mr. O'Brien: The statute does not prescribe that they shall make it by the coal gas method or by the water gas method. You could make it out of garbage if you wanted to.

The Master: I have your point, and I have sustained the objection.

Mr. O'Brien: The statute simply mentions gas, your Honor.

The Master: I know it.

Mr. O'Brien: Exception. Does your Honor make that ruling because that has not been gone into directly on the direct? 16844

The Master: No, not that alone. I do it for the following reasons: That the subject has been touched on. Mr. Chambers asked it, and you have asked it. The witness has repeatedly explained—he did, I think, on his direct, he brought out and indicated the difference between water gas plants and coal gas plants, and he has been asked over and over again about it, and the record is full of explanation, of argument, of inference and suggestion. He said that they looked into it. Now, if I let you go on further, and you say, "Well, what did you do," and he says, "Well, we reached the conclusion that it 16845 required more labor and more oil," and then you start to cross-examine on the cross-examination, and that brings out some other point, and it goes on *ad infinitum* till I have a mass of testimony here that is of no use to me at all. Therefore, I limit the cross-examination at this point.

Mr. O'Brien: Exception.

Q. Mr. Woods, has the company made any investigation into the proposition of making gas from crude oil?

16840 George E. Woods, Cross.

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception. Your Honor, the coke oven proposition has not been touched in this case.

The Master: You asked him; you asked him if they considered it, and he said yes.

Q. I call it to your attention so you will know what the effect of your ruling is. They have to show they are using the best method. They spent thirteen million dollars a few years ago to set up a coal gas
16847 plant, I suppose for economic reasons. If there is some other method that could be used, and some other kind of material for making gas, the statute not naming the method for making gas, it would then be incumbent upon them to show that they have the best and most economical method, and explain in some way why they have not adopted some other way of making gas more cheaply and making a fair return.

Mr. Ransom: This company is under no obligation to go into another business whereby gas becomes a by-product.

The Master: I stand by my ruling.

Mr. O'Brien: Exception.

16843 Q. The fuel under the boilers, Mr. Woods, is that figure based upon the actual experience of the companies reduced to an average or a weighted average?

A. Based upon my experience as to what the general average required for that operation is.

Q. Have you taken the showing of the various companies and averaged them?

A. I did not.

Q. On the cards that had been marked in evidence you have averages, haven't you?

A. Yes, I have the average on it.

16849

Q. And this showing here is above the average on these sheets, isn't it?

A. What do you refer to?

Q. Boiler house fuel?

A. Boiler house fuel is not in evidence; I have not talked on boiler house fuel.

Q. Well, you have a card for boiler house fuel there?

A. Yes.

Q. And you have averages on it?

A. Yes.

Q. And you are using it to refresh your mem- 16850
ory?

A. Yes.

Q. And it is the average actually used, as shown to you by some records of the several companies included therein, and that figure is greater than your average, isn't it?

A. It is less.

Q. It is less?

A. The average was 14.88 for 1918 and 14.91 for the eight months of 1919, on the average.

Q. 14 what?

A. 14.88 pounds.

Q. I am talking about anthracite coal? 16851

A. No, you were talking about boiler house fuel.

Q. I say this second item here—

The Master: There are two. One is 2 1/2 and one is 11 1/2, or 14.

Q. Isn't that 2 1/2 the $8 coal?

The Master: And 11 1/2 the $5.12 coal?

Q. Your average is 14?

A. Yes.

Q. Now, what do you say the average of these companies was?

A. The average of all companies for the eight months of 1919, was 14.91, and for 1918 it was 14.88, on a solid fuel basis.

Q. Have you got Central Union on that?

A. No.

Q. What companies have you got?

A. Mutual, Standard, New Amsterdam, Astoria and Consolidated.

Q. By a solid fuel basis you mean coal?

A. We used some liquid. Converting that to a solid fuel basis it amounts to that.

16853 Q. You use a liquid?

A. Some of it was a liquid fuel.

Q. That is the same price then, $8.26, or $5.12 a ton?

A. You were not asking me about the price, you were asking me how much it is on a solid fuel basis?

Q. Then you have to bring in a computation showing the relative weight of your liquid fuel and your solid fuel?

A. You do.

Q. In what plants of those on the card used by you to refresh your memory did they use a liquid fuel?

A. Every one of them.

16854 Q. And that was tar, was it?

A. That was tar.

Q. Tar produced by yourselves?

A. Right.

Q. Tar produced in the works where it was used under the boilers?

A. Right.

Q. At a price fixed by the company itself?

A. At a price which it was worth—

Q. Was it fixed by the company or by somebody else? It was not bought anywhere, was it?

A. No, it was not bought.

Q. Why didn't you say yes?

A. Why should I say yes?

Mr. Ransom: Let him finish his answer.

A. We were able to sell that tar last year at six cents a gallon, what we sold.

Q. Was it put on this estimate here at a price fixed by the company? Answer yes or no?

A. In the computation?

Q. Yes.

A. Yes, it was the price we were getting, the price we got for the tar, or the price it was worth to us as a boiler fuel. 16856

Q. Was it put in at the price that you got from the Barrett Company for it?

A. It was.

Q. Greater or less?

A. The same price.

Q. What is the formula that you used with regard to tar in reducing it to terms of solid fuel?

A. What is the formula?

Q. Yes.

A. Well, they had to determine the specific gravity of the tar, get the weight of it, and about 1.7 times that weight would be the equivalent value in solid fuel. 16857

Q. Is that element of tar found in this first line of "boiler fuel" or in the second line "boiler fuel (anthracite)"?

A. No, that is solid fuel. 14 pounds of solid fuel or its equivalent.

The Master: But you have two lines here.

The Witness: There are different prices, yes.

The Master: In which price is this tar?

The Witness: There is no tar in that computation at all. That is solid fuel, anthracite coal.

Q. Then you have here in this Exhibit 353 an es-

16858 George E. Woods, Cross.

timate reduced to cents per thousand cubic feet of gas made of the solid fuel used in the boilers in making water gas?

A. Right.

Q. And you have, when asked as to the quantities of such solid fuel, the average quantities which you say would be necessary to make a thousand cubic feet of gas, referred to some figures in other plants?

A. Right.

Q. Of boiler house fuel, which embraced liquid fuel?

16859 A. Right.

Q. And you have taken the figures in those other plants and reduced them into terms of solid fuel by adopting a factor of what?

The Master: 1.7 times the specific gravity.

A. 1.7 times the weight of the tar.

Q. What?

A. 1.7 times the weight of the tar. For every pound of tar 1.7 times that amount. In other words, it would take 1.7 times that amount of coal to do the same work.

Q. Then a pound of tar is relatively more efficient than a pound of coal?

16860 A. I so testified several days ago.

Q. Why was the boiler house fuel divided up into two classes?

The Master: Higher and the lower price.

Mr. O'Brien: One of 2 1/2 pounds and the other element of 11 1/2 pounds.

Mr. Ransom: Objected to. That has been already covered.

The Master: I think it is, but I am going to have the statement again.

A. Yes, I testified, your Honor, that it required about 35 pounds of anthracite coal, 2 1/2 pounds of

which was screenings and fine coal which we could not use in the generator, and that was converted to the boilers, and that 2 1/2 pounds was purchased at a high price, and when we used it under the boilers it was charged at the price at which the coal was purchased.

Q. Are these figures predicated upon an excellent quality of anthracite?

Mr. Ransom: Objected to. That was all gone over by Mr. Chambers.

The Master: I will allow that question.

A. No, we are not getting an excellent quality of 16862 anthracite.

Q. How about the coal you got last year?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: This will be important. You will not have a basis of comparison at all.

The Master: Objection sustained.

Q. What quality are you getting or what quality is assumed in this estimate?

Mr. Ransom: Objected to. That has been fully covered.

The Master: I will let him state once more what grade or quality he is getting. 16863

A. That is based on a coal that would give an evaporation of 6-1/2 pounds water.

The Master: That is the same estimate he gave us before.

The Witness: I have gone into that two or three times.

Q. Would your answers be the same about the labor handling that you made in answer to my questions of the same item in the coal gas costs?

The Master: As to how you got it or where you got it from?

16864 George E. Woods, Cross.

A. Right.

Mr. Ransom: It was covered on Mr. Chambers' cross-examination.

The Master: The answer to it was the same. It was the same to Mr. Chambers, and it will be the same again.

Mr. Ransom: But the handling on coal is not the same.

By the Master:

Q. But where you got it and how you made it up is the same?

16865 A. Right, your Honor.

Q. It is the same as to the city mass and water.

A. Right, your Honor.

Q. And gas making labor?

A. Right, your Honor.

Q. Repair labor and repair material?

A. Right.

Q. And miscellaneous works expense?

A. Right.

Q. And gas storage expense?

A. Right.

Q. And cost of distribution, so far as I let you testify?

16866 A. Right, your Honor.

Mr. Ransom: Renewals and replacements.

Q. And renewals and replacements?

A. Right, your Honor.

Q. You figured it in the same way with the water gas that you did with the coal gas?

A. Right, your Honor.

By Mr. O'Brien:

Q. The sources of the information and the method by which you set down these figures would be the same, although the quantities of labor, where you have

referred to labor, would be different than they were in the coal gas?

Mr. Ransom: Objected to.

The Master: What would be different?

Mr. O'Brien: The quantities of labor, or amount of labor, would be different.

The Master: Yes, that is right.

Q. But the answers would be the same as to the method by which you made your figures and your sources of information and so on?

A. They would.

Q. Mr. Woods, in this matter of the efficiency of 16868
coal and oil, you have taken a plant operating under the present day conditions and of a capacity that you have mentioned, with materials such as are being supplied today in the shape of coal and oil?

A. Right.

Q. The oil would be of an even 34 degrees?

A. No. The oil such as we are receiving is anywhere from—

Q. With the variances that you have already stated, 28 to 34?

A. Right.

Q. And in formulating this particular figure of 4.10 have you attempted to strike an average among 16869
several plants of the complainant company and the plants of the affiliated companies?

A. I have not attempted to strike an average. I have taken the general condition throughout, it being gas as used in the general transfer system, and those feeders are for the eight months of this year as to the Consolidated Gas Company 409—

The Master: No, just answer the question. You have not attempted to average it?

16870 George E. Woods, Cross.

The Witness: I have not attempted the average.

The Master: That is an answer.

Q. You have not brought in the quantities every year for a given number of years for each of the companies?

A. No.

Q. And given us an average of them?

A. No, I can give you an average of the different companies.

Q. I am talking about a series of years.

16871 A. No, I have not, your Honor. It is based on conditions as they exist today.

Q. The quantity of oil, assuming 34° or 28 to 34° specific gravity, would not change from year to year, would it?

A. The gravity would not change. The character of the oil may change.

Q. Even with the gravity remaining the same?

A. Yes.

Q. Would its efficiency for gas making purposes change, its specific gravity remaining the same?

A. Yes.

The Master: He told us yesterday that oil

16872 brought up to 40 or 41 would produce the same results as that at 34, with a different character of oil.

Q. So far as the plants are concerned of the 99th Street and 21st Street stations, have they been getting as much out of the oil that they use as the Astoria plant in its water gas department?

A. Yes.

Q. Relatively there is no difference in the three?

A. Practically none. There is some difference. The Astoria Company—

The Master: That is an answer.

Q. And the same would be said of the New Amsterdam and Standard and Mutual Companies?

A. Yes, the conditions of plant operation would be pretty much the same.

Q. Is there anything peculiar to the Mutual and New Amsterdam that would cause a difference in the efficiency of the oil?

A. The Mutual buys oil from different companies than we do. As to what grade of oil it might be, their oil might be a little different. There would not be any difference in Astoria and the company, except that the conditions of the coke might be different, which 16874 would affect the oil to some extent.

Q. We are to assume, then, that the labor element has been about the same as far as efficiency is concerned in all these plants?

A. Yes, although the labor is not the same in each case. It is not the same in each plant.

Q. As reflected in the results you get out of a given amount of oil, the labor is the same, the efficiency of the labor is the same?

A. At that particular plant, yes.

Q. And the fact that one plant is antiquated or of earlier date than another, does not make any difference in the results, the efficiency that you get out of 16875 a given amount of oil?

A. We have not any antiquated plants.

The Master: Well, if you had.

Q. One is newer than another, is it not?

A. If you had an antiquated plant and different type of apparatus, it would have some effect on it, your Honor.

Q. The difference in the dates when these plants were erected, and the fact, for instance, that the Astoria is a more modern and up-to-date piece of machinery does not make any difference in the results

so far as the efficiency of oil is concerned, that is being used by it?

Mr. Ransom: I object to the comments of counsel. There is no evidence that the Astoria is more modern and up-to-date. All these plants are kept modern and up-to-date.

The Master: I will allow the witness to answer the question.

A. The Astoria results are no better than the others.

Q. Now, I would like to ask you right off the reel here a question that has got me puzzled, and that
16877 is how it is that coal gas costs less to manufacture in Astoria than water gas, and you set it up in what I call hypothetical figures as just the reverse?

A. For the year 1919 it is higher than for water gas and we are not getting the same—

Q. The returns are not in for 1919 yet?

A. But I know. The cost for coal gas for the year 1918 is higher than the cost of water gas, which is due to two reasons.

Q. Isn't that just the reverse?

The Master: In 1918 was coal gas higher?

The Witness: Coal gas in 1918 was made for less than water gas in 1918 and coal gas in
16878 1919 is costing more than water gas in 1919.

The Master: Mr. O'Brien wants to know why.

Q. There was a variation of some 23 cents, was there not, between the cost of the two per thousand cubic feet in 1918, as represented by the Astoria Company?

A. No, no such difference as that.

Q. Well, approximately that?

A. No.

Mr. Ransom: Nowhere near that.

By the Master:

Q. Now, why has it shifted this year?

A. Because we are paying more for coal, for one thing, your Honor, and every dollar for coal adds ten cents to the price of gas, to the cost of gas production. We are getting less for our residuals, and the residual item represents a very large item in the cost of coal gas production. So that one year under conditions with a low price of coal and a high price for residuals you can get a low coal gas production, and the reverse will happen when those conditions go the other way. As I testified, it is infinitely much easier to make a price or estimate as to what water gas will cost than what coal gas will cost, 16880
on account of having to dispose of such quantity of residuals, which represent such an element in the coal gas production.

Q. Did I not understand your testimony to be that, generally speaking, year in and year out, it is cheaper to make water gas than coal gas?

A. That varies, your Honor. The whole thing is a reflection, and I could not place—I think we have made water gas cheaper than we have made coal gas, and vice versa, and it depends upon the price of oil, which represents a large factor in water gas production, and the cost of bituminous coal, and the disposal of the other. They might be just the reverse, 16881
your Honor, one year it might be one way and one the other way, just as indicated in the year 1918 and the present day.

By Mr. O'Brien:

Q. Mr. Woods, would the difference between the price of coal today, or in 1919, as against the prices of coal in 1918, account for the change in the result, in your mind, where we have a variation of fourteen cents in the cost in 1918, of water gas, over coal gas, and the whole condition more than reversed this year?

16882 George E. Woods, Cross.

A. Yes, the price of residuals and the price of labor would all be reflected in whatever that amount was.

Q. Let me put my finger on the important elements in that proposition you have just enunciated. The price you get for residuals is important, is it not?

A. It is, yes.

Q. And if the result you get in cash from the residuals goes down, then the cost of the coal gas goes up; that is so?

A. That is right.

The Master: He so testified.

16883 Q. And therefore the method by which you market your coke and other residuals becomes a very important matter in the running of a coal gas plant?

A. The disposition of them.

The Master: It is a very important factor?

The Witness: It is important, yes.

Q. You do not get into that end of it, though, the marketing of the coke, do you? That does not come within your domain?

A. No, only to the extent that the price is established as to what we can use coke for as compared with anthracite.

16884 Q. Who is it that passes judgment upon the question of how much coke you are going to put to the public, and the question as to how far the sending out to the public of coke for private use might interfere with your selling gas for cooking purposes, and all those details? Who is it that regulates that?

A. I do not think it is ever considered in connection with the sale of gas to restrict the sale of gas in any way. We are in opposition with anthracite coal.

Q. One of your former employees, Mr. Alton Miller, thought that was a very important thing and you might be cutting your own throats. Has that come up with you?

Mr. Ransom: I object to the question of counsel as incompetent and improper.

The Master: Objection sustained.

Q. You say you have not given that any thought?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Q. Do you consider that of minor importance, the question as to how far that sale of coke might interfere with your selling of gas for heating purposes?

Mr. Ransom: Same objection.

The Master: Objection sustained.

Mr. O'Brien: Exception. 16886

Q. Who determines how much coke you are going to use in your water gas plant at Astoria and in your 99th Street and 21st Street plants of the complainant company?

A. I do.

Q. Are written directions given to the superintendents of the plants from time to time as to how far they are to go in those matters?

A. No, probably not.

Q. Well, do you settle them at the weekly luncheons you have?

A. We may at that time or some other time.

Q. Do you get a report from the National Coke & Coal Company as to how coke is selling and use that to decide how much you are going to use in those plants? 16887

A. That might have a bearing on it.

Q. Well, does it?

A. It would at times.

The Master: You mean it does at times?

The Witness: It does at times.

Q. What steps are taken to advertise and to exploit your coke, or have been taken during the year 1919?

16888 George E. Woods, Cross.

A. None to any great extent, because we are trying to conserve our product.

Q. You are trying to hold it?

A. Yes, as the coal situation is not extremely good.

Q. Well, have you been doing that all the year?

A. We have been. The National Coal & Coke Company are selling what coke they can at the price that they are asking for it, which is a price that we do not feel we could sell it for any less money, and rather than to increase our sales by decreasing the price, we use our coke ourselves.

16889 Q. What steps, if you know, are the National Coal & Coke Company taking to distribute their product and make it popular and advertise it?

The Master: If you know.

A. Just what steps are taken I don't know.

The Master: Well, why don't you say so.

Mr. O'Brien: Somebody came to my office a while ago, some few months ago, your Honor, to sell me some.

The Master: Maybe they were trying to plant something on you.

Q. When you formulated this figure 4.10, did you have before you the reports made up from the manu-

16890 facturing books of the several stations and several companies showing the quantities they had used to produce 22 candle power gas from month to month?

A. I probably knew the figures. I do not know as I had any reports just at that time when I made that up. I know it would take about 4.1 gallons, taking the conditions as a whole.

Q. Well, if we found it took 3.65, 3.70 and 3.75 in the books for a number of years, it would be more reliable, wouldn't it, than some figure made by you?

A. If you could find in all the books any such amount, I would say it would be, but you would not

find any such amount. You might find some condition at some particular place making a small amount of gas where they were able to do that, but if you took the conditions as a whole, covering the situation as a whole, you would find then it would be in the neighborhood of 4.10 gallons. It would vary from 4 to 4.15, and you would get a condition then of 4.10 gallons, and I will base my reputation that it cannot be done for less covering the situation as a whole.

Q. Well, if you would only give us a photograph of what you mean by the situation as a whole, we might be able to describe it? 16892

A. The matter of the distribution of gas throughout the City of New York and supplying 22 candle power.

Q. The situation is what?

(Answer read by the stenographer.)

Q. You saw the contracts made with the government, didn't you, for the extraction of toluol?

The Master: Objection sustained.

Q. Well, Mr. Woods, when you made up these figures, did you have before you the price that they set for that in the contracts? I mean the quantities of oil that they set forth in those contracts there, that were required to make 22 candle power? 16893

A. I did not, and I did not need them.

Q. Well, did you vise those contracts before they were signed by the officers of the company, the toluol contracts with the government?

A. I did not.

Q. Well, would you alter your statement in the face of the representation made there that it was 3.6 and 3.65, 3.82, 3.85, 3.83, 3.75, 3.73, 3.71, and 3.68?

The Master: That is enough.

Q. And so on.

Mr. Ransom: What plant? I object to counsel making a statement.

Q. Would that change your opinions at all?

Mr. Ransom: He has not indicated what plant or what conditions.

The Master: It is in the record, it is either 99th Street or 21st Street.

The Witness: You are reading from the 99th Street Station, and if you will look at the 21st Street Station you will find that the quantities are far different from that. 99th Street making
16895 about 3 to 3 1/2 per cent of all the gas made in New York of the Consolidated and its allied companies.

Q. What, the 99th Street is?

A. 3 to 3 1/2 per cent.

The Master: What is the 21st Street figure?

Mr. O'Brien: I am reading the figures from the contracts.

The Master: Let us see the 21st Street figures.

Mr. O'Brien: I don't know whether they refer to 21st Street or 99th Street.

The Master: Well, let us see the figures at
16896 21st Street. You have it there. Let us see the corresponding figures for 21st Street.

Mr. O'Brien: The figures for that, your Honor, are in the contracts 4.14, 4.—they run for five years, 1912 to 1917, and they range from—

Mr. Ransom: Well, what are they?

Mr. O'Brien: From 3.99 to 4.14.

Mr. Ransom: Read them.

The Master: Read them down for me. 1912 was what?

Mr. O'Brien: It looks as though it is the average for five years of each month of each year.

The Master: All right, read it.

Mr. O'Brien: December 4.14, 4.23, 4.26, 4.14, 4.03, 4.05, 3.99, 4.01, 4.04, 4.03, 4.07, 4.09. Now they are said to be some averages, that is all. Of course, whether they are averages of the books that you and I went over—

The Master: You can cross-examine Mr. Woods about whatever those contracts refer to as averages of something. You have the 99th Street, and I thought it was only fair to have 16898
21st Street in connection with it. Do those figures change your judgment in any way?

The Witness: Absolutely not, your Honor.

The Master: You will stand by your statement that it takes, all things considered, 4.10?

The Witness: I do.

Q. Well, Mr. Woods, while you are right on the subject, do you get a greater efficiency out of a gallon of oil in a plant that is smaller than another?

A. We do not.

Q. Well, how do you explain the difference between the two plants just referred to? You just referred to it as—by referring to the relative quantity of gas 16899
made. What has that got to do with the relative efficiency of a gallon of oil?

Mr. Ransom: You have asked him to explain the difference between the two plants. Now, let him do it.

The Master: Yes, let him say how it is at 99th Street they need less oil per thousand cubic feet than at 21st Street.

The Witness: The candle efficiency at 99th Street and 21st Street are approximately the same, taking a long period of time, covering a

period of time, because we have greater difficulty in maintaining the candle power on the districts in the lower end of the city, and we have to carry a higher initial candle power at some places in order to maintain the candle power on the district.

The Master: That is this pressure question you spoke of?

The Witness: Yes; and I explained that before, that we are carrying—

The Master: He explained that before.

16901 Mr. O'Brien: Well, he tried to explain it before.

The Master: I won't take any more on that.

Q. The books do not bear out the statement you make, do they, Mr. Woods, that you had a—

The Master: Objection sustained.

Mr. O'Brien: Just get my statement, your Honor.

Q. (Continuing.) The manufacturing books do not bear out the statement you have just made that you get a much larger or greater candle power at the works in 21st Street than you do at 99th Street?

The Master: Objection sustained.

16902 Q. You don't mean at the works the candle power has to be bigger?

A. Oh, absolutely.

Q. So that that would all be reflected—that condition would be reflected in the manufacturing book for the 21st Street station?

A. It would.

Q. Is the territory covered by the 99th Street plant a wider area or lesser area than the area covered by the 21st Street station?

Mr. Ransom: I object to that as already gone over.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you use any more iron mass in this case than you do in coal gas?

A. We use less.

Q. Less water?

A. There is very little difference in water.

Q. I see your gas making labor is 9 cents in coal as against 2 1/2 cents in water gas?

A. That is right.

Q. Does that run the same evenly through the year?

A. No, not always. 16904

The Master: But there is always a great deal less labor required in making water gas than in coal gas?

The Witness: Very much, your Honor.

Q. Due to the handling of residuals, is it?

A. Due to the method of production. It requires a great deal more labor to make coal gas than water gas.

Q. Well, with the price of labor in a given year, wouldn't your relative cost be the same on the labor and of it?

A. With the price of labor always the same, conditions the same, the operation the same, yes, it would 16905 be the same.

Q. What would be your price last year for those two items?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Have you got that?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Ransom: If you want the actual figures for last year, we will give them to you.

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Q. If you were making an estimate as of a year ago, what would it be in cents per thousand cubic feet for gas making labor under the water gas system?

Mr. Ransom: Objected to.

The Master: I will let him state.

A. It would probably be less because the price of labor, the hourly rate of pay for labor was less a year ago than it is today, and that would be taken into consideration.

Q. Well, you have not set up any opinion figures similar to these Exhibits 354 and 353 for the other
16907 years?

A. No occasion to. We are operating as of today.

The Master: You have not.

The Witness: I have not.

The Master: Answer the questions and you will get away tonight, otherwise you won't.

Q. Well, now, so far as the operations go for other years, the quantities will be about the same, will they?

The Master: What do you mean, the quantity?

Mr. Ransom: Objected to.

Q. Assuming the qualities of the coal and of oil are even and uniform?

16908 The Master: That has been gone over.

Q. (Continuing.) The quantities would be the same?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Ransom: Mr. O'Brien has gone back to that every third or fourth day.

Q. How do you account for the great difference in repair labor, Mr. Woods, coal gas as against water gas?

Mr. Ransom: Objected to. It has been covered twice.

The Master: I will let him answer.

A. Because it is a different type of apparatus, different process of manufacture.

Q. It gets out of order more frequently?

Mr. Ransom: That has been answered twice today and once before.

The Master: Objection sustained.

Q. Are you running to your capacity over at Astoria now, on coal gas?

Mr. Ransom: Objected to.

The Master: I will allow it.

A. Not at the present moment, no. 16910

Q. What is your limit on that?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I move at this time to strike from the record, Exhibits 351 and 352.

The Master: Motion denied.

Mr. O'Brien: I move that on the ground that they are not properly supported by any underlying data, that they are speculative, that they do not thoroughly reflect the facts as shown in the original sources of information; that they will be misleading to the Court as well as to every- 16911
body concerned, and that they only tend to becloud the actual costs of labor at the times mentioned.

On the ground further that the figures are set up in groupings and under titles that are not used in the books of account and the underlying books, or in the reports to the Public Service Commissioners, or in the practices of gas companies, so that they may be compared with these others, and be of some value.

I make the motion on the further ground that

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the data used has been separated, and it will be well nigh impossible for the representative of the defendant to go back over the trial and find the places where these figures were assembled, they not having been set up on the pay rolls or in the time books or other books of original entry in the form in which they have been submitted here.

The Master: Motion denied.

Mr. O'Brien: Exception.

By Mr. Chambers:

Q. Mr. Woods, will you please tell me what tests
16913 have been made officially or unofficially, and what records have been kept of every description covering the period from 1906 to date, with regard to the illuminating value and heating value of the gas made at the works of this company?

Mr. Ransom: Objected to.

The Master: The first thing you want to know is what tests have been made, official or otherwise, as to the candle power and heating value?

Mr. Chambers: Yes.

The Master: And second, what records have been kept.

16914 Mr. Chambers: Yes.

The Master: Now, as to the tests, official and otherwise, the objection is sustained, because the witness has already described what tests were made, very fully.

Mr. Chambers: We have examined and find that he has not.

The Master: My recollection is very distinct of his talking about this ten candle power and five candle power lamp, and the Edgerton tests, and other tests. Objection sustained.

As to the records, I understand the witness to say that the records were in the manufacturing records as tested at the works from day to day.

Are there any other records kept?

A. I don't think there are any other records kept of the hourly observations. The day's observations would be recorded in the manufacturing records.

The Master: You don't know of any other records?

The Witness: I don't know of any other records?

Q. Of illuminating power? 16916

A. Yes.

Q. Or heating power, both?

A. We don't make any tests for heating power. There were tests made for heating power at the 99th Street station by the chief chemist, of which I have no record myself.

Q. Who has that record?

A. I do not know.

Q. Is it among the company's books and papers?

A. I don't know.

Mr. Ransom: I object to that as immaterial. There is no statutory requirement—

The Master: There is not, but if there is any 16917 such record I will see about it. Is there any such record?

The Witness. I don't know.

Q. You know he made tests?

A. There were tests made, yes.

The Master: How long ago?

The Witness: I think in 1917.

The Master: As a regular thing, you mean, covering the year?

The Witness: I don't know just how many tests or what period of time they covered.

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The Master: But you know there were some tests made?

The Witness: There were some tests made of heating value.

The Master: Whether there was a record kept of it you don't know?

The Witness: I don't know.

Q. Is that the only station?

A. That is the only station I recall, Mr. Chambers.

Q. Or any other year except 1917?

A. That is the best information I have.

16919 Q. What tests are made with this gas laboratory apparatus in the Astoria plant owned by the Consolidated Gas Company?

Mr. Ransom: I object to that.

The Master: If the witness knows.

Q. You have a laboratory apparatus over in Astoria?

A. I don't know.

Q. Belonging to the Consolidated Company—you don't know about that?

A. Yes, we have such a laboratory.

Q. Belonging to the Consolidated?

A. It does.

16920 Q. What tests do you make over there with that apparatus?

A. Those tests are made by the chemists. What tests he makes I don't know.

Q. Does he test for illuminating power?

A. I have testified I don't know to what extent he makes any kind of tests.

Q. Does he test for B. T. U.?

The Master: Objection sustained; the witness has said he doesn't know.

Mr. Ransom: That is a material testing laboratory.

Q. You don't know whether it is B. T. U. tests or not?

The Master: He doesn't know what tests are made. Objection sustained.

Q. Why is it you don't know, Mr. Woods?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. What is the heating value in B. T. U.'s of the water gas set forth in Exhibit 353?

The Master: Objection sustained. I am not interested in the B. T. U.'s.

Mr. Chambers: Well, it makes some difference 16922
in the case.

The Master: I don't care whether it does or not. Objection sustained. The statute requires 22 candle power.

Mr. Chambers: Exception.

Q. What is the heating value in B. T. U.'s of the coal gas set forth on Exhibit 354?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Chambers: Exception. I submit that you will find hereafter how important this is. I know you are not interested in heating power of the gas, but it is important to find out what B. T. U.'s 16923
will be shown by the water gas and coal gas of these two exhibits for the purpose of computing the cost.

The Master: I will rule it out.

Q. Are your figures in Exhibits 353 and 354 respectively figures of average cost for a year?

Mr. Ransom: Objected to as fully covered.

Mr. Chambers: And others.

The Master: Objection sustained. The witness has repeatedly stated that they are not.

Q. What is the heating value of the coal gas which

you have given on Exhibit 354, before any oil is used for enrichment?

Mr. Ransom: Objected to.

The Master: The objection sustained on the ground that we are not interested in heating value.

Q. What is the heating value of the coal gas after its enrichment?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. Chambers: Exception.

16925 Q. Where is the heating value tested; that is, where is the plant located?

Mr. Ransom: That is objected to.

The Master: Same ruling.

Mr. Chambers: Exception.

Q. What would be the heating value of the gas specified by you on Exhibits 353 and 354 respectively at the works?

Mr. Ransom: Objected to.

The Master: Same ruling, and I request that counsel ask no more questions about heating value.

Mr. Chambers: I want to ask this and take
16926 my exception because you will see hereafter that you did not allow us to do it.

The Master: You have covered the line.

Mr. Chambers: May I ask one more?

The Master: Go ahead.

Q. What would the heating value be both at the works and at a testing station not less than a mile from the distributing holder?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. Chambers: Exception.

Q. Is the cost of manufacture as used on Exhibits 353 and 354, respectively for identification, the same as used in the Public Service Commission's System of Accounts defining "Production Expenses"?

The Master: Objection sustained as having been fully covered.

Mr. Chambers: Exception.

Q. Now, you said you assumed seven per cent of the gas made would be unaccounted for in your figures?

The Master: That is what he said.

Q. Did you? 16928

The Master: He did.

Q. Will you give the percentage unaccounted for covering the entire Consolidated Gas Company's system—can you give that?

Mr. Ransom: As of what date? I object to the question anyway, it is fully covered.

The Master: What period, Mr. Chambers?

Mr. Chambers: Same period that he used the 7 per cent for, 1919.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Will you give the gas unaccounted for in percentage? 16929

A. All the inter-company sales and duplicate entries have been eliminated.

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. Chambers: Exception.

Q. Now, is it not a fact that the amount of unaccounted for gas has never in the history of this company or any of the allied companies, reached as high as 7 per cent?

Mr. Ransom: That is objected to.

The Master: Same ruling.

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Mr. Chambers: Exception.

Q. Have you ever known anywhere, any place, of unaccounted for gas in actual experience, amounting to as much as 7 per cent?

The Master: Same ruling. I think we have had enough of that.

Mr. Chambers: Exception.

The Master: Is that all?

Mr. Chambers: Well, these things you are ruling out are pretty important.

Mr. Ransom: It was 15 per cent in the case
16931 of the Kings County Lighting Company. Contrary to counsel's statement this is the lowest figure I know of.

Q. Did you know that in 1918 the unaccounted for gas of the Central Union was only 3.03 and your own company was only 4.57?

Mr. Ransom: Objected to; that has all been covered, as to how that was computed at that time.

The Master: I understand that, but I will let the witness state whether he knew that the Central Union was as low as 3.03.

The Witness: I did not.

16932 Mr. Chambers: You will find it in the reports to the Public Service Commission.

Q. Now, the unaccounted for gas was higher, was it not, in the winter of 1917-18, than ever before, because of the severity of the weather, or don't you know?

A. On the entire system my recollection is the unaccounted for gas for 1918, was a little less than 1917.

Q. Well, you didn't answer my question.

The Master: Can you segregate the winter months as compared to other winter months?

A. That was for a year.

The Master: Have you anything in your mind on which you can compare December, January and February, 1917-1918, with December, January and February, 1916-17?

The Witness: No.

Q. That severe winter had some effect on that?

A. Undoubtedly.

Q. That tended to aggravate it, didn't it, or increase the percentage?

A. I have testified that temperature conditions affect unaccounted for gas.

Q. Then the temperature conditions were abnormal, 16934
were they not, that winter?

A. We had some cold weather.

Q. We had a long stretch of cold weather.

The Master: The Court will take judicial notice of it. It was a tremendously severe winter and lasted from almost the middle of December until well into February.

Mr. O'Brien: It was unprecedented, your Honor.

The Master: That is why I say the Court will take judicial notice of it.

Q. You don't want the Court to understand that you can lay down a formula, do you, for unaccounted 16935
for gas at 7 per cent?

A. Based upon our last two years of operation, the unaccounted for gas has been on the entire system slightly in excess of 7 per cent. If weather conditions will be such as we have had heretofore, we will continue to have seven per cent, and if the weather conditions for the year are less than those periods, the probabilities are it will be slightly under 7 per cent. I have based it on the conditions we have had for the last two years, where the unaccounted for for the entire system has been in excess of 7 per cent.

How long that is going to continue, I don't know, because I am not a prognosticator to tell you what the elements are going to do in the next two or three years.

Q. Over all these years, up to 1917-18 and 1918-19, you never had anywhere near 7 per cent on your entire system, did you?

A. We did. We were running between six and seven per cent.

Q. What year?

A. I don't recall the exact year, Mr. Chambers, but
16937 I have tried to explain here that the temperature of the ground has a great bearing on unaccounted for gas conditions. As the temperature is down the unaccounted for is up, and inversely.

Q. Last winter was mild?

A. Last winter was mild.

Q. How do you account for the so large unaccounted for gas?

A. Because we had an extremely cold spring in 1918, in which the ground was frozen for a considerable period of time. As the Master has said, we had cold weather well on until the middle of February and frost was not out of the ground probably until the
16938 middle of March.

Q. I want to ask you if you want to set up the formula of seven per cent for unaccounted for gas as correct?

A. I am not setting up any formula. I am stating conditions in New York City last year and the year before. I cannot assume—

Q. From 1906 to date, do you want to state that it is fair to take seven per cent for unaccounted for gas for this company?

A. I have not taken from 1906.

Q. Do you know that to be fair, to cover a period of years, the average—in other words, you have picked out two abnormal periods.

Mr. Ransom: I object to the question and the attitude of counsel. It is argumentative.

The Master: I will let him say.

Mr. Ransom: He should indicate either the company or the system.

The Master: What I am going to let Mr. Chambers bring out from this witness is whether the witness has been fair or unfair in taking the seven per cent basis, based upon the last two 16940
years, or whether the witness is prepared to say that based on his experience running back for the last ten years, that was a fair average over that period of ten years?

A. My judgment is that for ten years it might be one-half of one per cent less than that. I took the last two years, which was representative of these conditions.

Q. Is that as much as you concede, one-half of one per cent, covering the period of ten years?

A. That is my judgment, yes, covering the situation as a whole. Not covering the Consolidated Gas Company. 16941

Q. Well, the Consolidated Gas Company, covering a period of ten years, we have your figures on.

A. I did not take the Consolidated Gas Company, I took the situation as a whole.

Q. Would it not be three per cent or four per cent?

A. It would not.

Q. That is too little?

A. It is covering the system as a whole.

Q. No, the Consolidated?

A. The only way I can answer that, your Honor, as I explained the other day, when these companies

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went in they took their unaccounted for at six or seven or eight, whatever it was, and the Consolidated took the difference, and at certain periods of time there the Consolidated in taking the difference had a low, unaccounted for gas.

Q. Covering a period of ten years last past would it not be about four per cent? Wouldn't four per cent be about right as your records show?

A. It would not.

Mr. Ransom: I object to the question as to what the records show. They do not show any

16943 such thing.

The Master: Eliminate from the question what the records show.

Mr. Chambers: Yes.

By the Master:

Q. Would four per cent be fair for the last ten years?

A. Covering the system, your Honor?

Q. The Consolidated system.

A. It would not.

Q. The Consolidated Company alone?

A. I do not know, I would not like to say, your Honor.

16944 Q. Why do you hesitate to say that it would not be fair to the Consolidated alone as distinguished from the Consolidated system? What is the point?

A. Because, your Honor, all those companies were running from six to seven to eight per cent, and they were being based upon that, and the Consolidated might have been somewhat less. After those averages had been taken against the other companies it might be less.

Q. Why should the Consolidated be substantially less than the other companies?

A. Why, there should not be any "substantially." I think possibly the Consolidated Gas Company had

to some extent a little less unaccounted for as the result of that operation.

Q. I do not quite understand this, Mr. Woods. I get the impression from what you say that the average of the Consolidated alone for the last ten years would show up less than the average of the allied companies?

A. It would, and it always will be less, your Honor.

Q. Why?

A. The unaccounted for gas of the Consolidated Gas Company will be less than for the Consolidated 16946
system, because they are selling more gas per mile of main. Some of the affiliated or allied companies will sell from nine to ten million cubic feet per mile of main, while the Consolidated will sell from nineteen to twenty per mile of main.

Q. And that would make the difference?

A. That would make the difference, and if there is unaccounted for in the way of leakage, etc., there will not be any more actual leakage.

Q. But there will be more per mile of main?

A. There will be the same amount per mile of main, but their sales will be so much greater that the percentage would be that much less. 16947

By Mr. Chambers:

Q. How do you account for the fact, Mr. Woods, that year by year your records for the entire system show never as much as six per cent.

Mr. Ransom: I object to the statement because it assumes facts that are not in any way in evidence, and that are not in accord with the actuality.

The Master: I think you would be justified in showing to the witness the report of this company.

Mr. Chambers: I will ask him it in this way.

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Q. Assuming that these figures I show you are correct—

Mr. Ransom: No, I object to the question in that form.

The Master: I will sustain it as to form.

Q. You look now at the figures of the company for the entire system (handing witness book)?

Mr. Ransom: I object to this question, with the witness shown some paper made by some unidentified person.

Mr. Chambers: Made up by Mr. Hine, who
16949 worked with you.

The Master: Do not let us use it; it is of no use to us. Objection sustained.

Mr. Ransom: I will consent that any report of the Public Service Commission may go in evidence.

Q. You have made a study, have you, of the unaccounted for gas as reported by your company, Mr. Woods?

A. I have at times

Q. In the course of your study did you ever happen to run across any figures like these?

A. I do not know where he got these figures, but
16950 I do not think they are right.

Q. He got them out of the Commission.

A. I don't know where he got them, but I don't think they are right.

Mr. Ransom: I object to these figures.

Mr. Chambers: They are the Consolidated Gas figures. You will find out they are the company's figures.

Mr. O'Brien: Why don't you give us some frank disclosure. Strip the shirt off this man of straw and let us see it.

The Master: Next question.

Q. Did you ever make a study of the figures for

the unaccounted for gas of the entire system covering, say, 1908, down to date?

A. I have, and how those figures can be correct I do not know, Mr. Chambers, when the Standard Gas Light Company have for a good many years used a figure of seven per cent arbitrarily as being their unaccounted for gas, and how you can get any five and a half or five and three-quarters out of that figure I do not know. The New Amsterdam Gas figure was an arbitrary figure of eight per cent unaccounted for at the time they went into the system. How they can get five and a half or five and 16952
three-quarters per cent on the system—they could not do it, that is all. I don't know how they made up these figures.

Q. You mean who?

A. I don't know who made them up, or how they made them up.

Q. Who makes up the figures of the Consolidated Gas Company for their report on unaccounted for gas?

Mr. Ransom: I object to the question.

The Master: I will let him answer.

A. I do not know.

Q. You have not any idea who does it? 16953

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: I will let him say.

A. They are probably made in the Accounting Department. I do not know.

The Master: I think I will give Col. Hayward a chance to go into unaccounted for gas a bit. There is a serious question about it.

Mr. Chambers: I suggest that they call Mr. Armstrong here to produce the average annual make for the six years' period at the 99th Street plant which he used in compiling his figures,

and which he said he had given but did not have when he was on the stand.

The Master: I will let that go until we get through with Mr. Brundage and Mr. Teele.

Mr. Chambers: I think before we examine Mr. Brundage all those books ought to be here.

Mr. Ransom: They will be here. I would like to bring up one thing that I would like your Honor's direction on. The request has been made by Mr. Frank in behalf of the Public Service Commission for leave to copy off the names
16955 and salaries shown on the general offices' pay roll. Beyond the checking which has been done he desired to copy off all the names and all the salaries. It is the view of the complainant company, as your Honor knows, that the checking which he has had full and untrammeled opportunity to make, including not only examination of the executives' salaries, is as far as they have a right to go, and his personal ideas should not be gratified, or worse, that those things should be copied off and peddled around we most emphatically object to.

Mr. Chambers: I will ask you what basis there
16956 is for that?

Mr. Ransom: I have made my statement.

Mr. Chambers: You have not any basis for it, as far as I am concerned. As far as our side of the case goes we want those salaries and names, and if you will eliminate them all from the case, throw out all the salaries, perhaps we will talk with you then.

The Master: Who is Mr. Frank?

Mr. Ransom: Mr. Frank is an employee of the Accounting Department of the Public Service Commission who has been at work at the office of the company for many months.

The Master: Would he not have the right as a representative of the Public Service Commission to copy any entry in any book, with or without your permission?

Mr. Ransom: Probably he has a right to copy; he has not the right to divulge it.

The Master: I am not talking about his divulging anything.

Mr. Ransom: If he does copy it it will be divulged.

The Master: To whom?

Mr. Ransom: To Mr. O'Brien. 16958

The Master: Mr. O'Brien is entitled to have it.

Mr. Ransom: He is entitled to have it in an orderly way perhaps.

The Master: My ruling is that Mr. Frank should be permitted to copy those names, and Mr. Frank, in my judgment, has a right to give a copy to counsel representing the other defendants so as to save them going over the same thing.

Mr. Ransom: That view is objected to very strongly and very earnestly in behalf of the company, and we regard it as a very improper thing. 16959
We shall, however, of course, comply with your Honor's ruling.

Mr. Chambers: If the Master please, should not he state what basis he has for those statements?

Mr. Ransom: Counsel for the defendants have continually and habitually talked with reporters for the New York World and New York American in this court room and have given false and misleading statements representing things to have happened that have never happened.

Mr. Chambers: Do you address that to me?

Mr. Ransom: I mean Mr. O'Brien and Mr. Chambers.

Mr. Chambers: You prove that or apologize.

Mr. Ransom: I will not apologize.

Mr. Chambers: Well, you will. I have never talked with a reporter about this case with the idea of giving any news. I have said, "How do you do" to one reporter here.

Mr. Ransom: I can substantiate my statement.

16961 Mr. Chambers: I would like you to do it.

Mr. O'Brien: And I ask that you do that or withdraw your statement.

The Master: What is the other matter?

Mr. Chambers: I don't like this.

The Master: Get it off your chest after I am through with this formal matter.

Mr. Ransom: A demand has been made by Mr. Frank, likewise in behalf of the Commission, for these statistical studies going back to 1906 to 1917. They have already had 1918 and 1919. Our view is in the first place they are not matters which they are entitled to have access

16962 to, they are not within the issues of this case, or not any of the underlying data.

The Master: Well, Judge Ransom, I think I am doing the complainant company a service by directing you to let you have them. That is my view about it. I think myself it would be a great mistake if this record should show there was any paper affecting the gas business, even of a statistical nature, that you are not willing to give to the other side upon request and let them study it as much as they please.

Mr. Ransom: I shall be glad if it will go in evidence.

The Master: No, you can't make any limitation of that kind.

Mr. Ransom: The idea that an investigation made from all sorts of viewpoints of all sorts of people and brought together in a book—

The Master: Well, as a practical proposition, take your chances. If there is anything in any of those books that they think is at all necessary to them, the chances are they will bring it into court, or ask you to produce it, and if they make reference to it, it is in evidence, and if they put one in evidence, I will probably allow 16964 them all in.

Mr. Ransom: I will follow your Honor's directions in this respect, but I want the attitude of the company noted.

The Master: I think you are making a mistake myself.

Mr. Ransom: Well, we will make no mistake in following your Honor's direction.

The Master: No, and I think so far as the record is concerned, it will be better if your attitude had been "a request is made of us; we do not think it is the proper thing to do; we think it is away outside of the record, but we are going to do it." 16965

Mr. Ransom: That is why I have myself brought it up and asked for your ruling.

Mr. Chambers: I would like to have it noted on the record—

The Master: Court is adjourned before the personalities begin.

Mr. Chambers: No, I would like to have it noted on the record that I have not, since this case was begun, given one single word to a newspaper about the case for publication, or otherwise, that I am aware of.

The Master: All right. Mr. O'Brien, will you make the same statement?

Mr. O'Brien: No, I make my own statements. I want to challenge Mr. Ransom to prove his own statement he has just made. It does not get under my skin, because he talks at random, and he has been talking at random during the case, but I think he ought to be manly enough to modify the statement he has made.

Mr. Ransom: I have made no statement that is at all untrue.

16967 Mr. O'Brien: Well, I cannot compel you to do it.

The Master: Well, I think I will just close this discussion, in view of the statements made. My only view of it is that you ought to accept Mr. Chambers' statement in the spirit in which it is made, and under the circumstances it is made, and assume that Mr. Chambers would not make it if he did not mean it, and I think under the circumstances you do owe Mr. Chambers an apology. Mr. O'Brien refuses to make the kind of statement Mr. Chambers does, and therefore, you do not owe him an apology.

16968 Mr. Ransom: I will leave the matter entirely as on the record. I brought it up only because it was asked for. I should not have brought it up unless it had been asked for.

Mr. O'Brien: Well, it don't get you anywhere, that kind of a crack and you ought to be man enough to come forward and apologize.

Adjourned to Thursday, October 30, 1919, at 9:15 A. M.

Last Complainant's Exhibit 361.
Last Defendants' Exhibit MM.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 16969

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, October 30, 1919.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 16970
MR. O'BRIEN, of Counsel for defendant Swann.

GEORGE E. WOODS, resumed the stand.

CROSS-EXAMINATION BY MR. HAYWARD:

Q. Mr. Woods, I want to take up first this morning the question of unaccounted for gas, very briefly. If I have understood you correctly, you make a charge now of seven per cent in your estimated figures which have been put in evidence here, in your table—is that 16971 correct?

A. Right.

Q. And that is your best estimate of the proportion, the percentage of loss that should be charged to the Consolidated Gas Company?

A. That is an estimate covering the entire system. The unaccounted for gas for 1918 and 1917 was in excess of seven per cent.

The Master: Just answer the question, Mr. Woods.

16972 George E. Woods, Cross.

Q. Those figures you have made up yourself?

A. As to the unaccounted for?

Q. Yes.

A. Yes.

Q. Well, it is an arbitrary figure to some extent at least, isn't it?

A. Arbitrary that I use seven per cent in view of the unaccounted for that we had.

Q. It is based on some experience or opinion on your part?

A. It is based on experience of the last two years
16973 operations in the City of New York.

Q. Now, as a general rule, forgetting the question of quantities of unaccounted for gas, and simply taking percentages, which you have done in this case, as I understand it as a general rule the more dense the consumers are on gas system the less percentage of loss there is. Isn't that so?

A. Based upon main mileage, if you had a greater sale per mile of main the unnaccounted for would be less.

Q. The greater your sale per mile of main the lower the percentage would be of unaccounted for gas, no matter what the quantity was?

16974 A. In so far as the manner in which we calculate the unaccounted for gas is concerned it is based upon that, Col. Hayward.

Q. For some years, in fact for the years from 1908 to 1916, as shown by the reports to the Public Service Commission of the Consolidated Gas Company, the amount of unaccounted for gas—or rather, not the amount, the percentage of unaccounted for gas was always below five per cent, and sometimes as low as under three per cent?

The Master: I shall sustain the objection to that, Colonel, because it has been fully covered.

16975

and the explanation given for it from the standpoint of this witness. He said that the reason for that was that during those years they took the total quantity of unaccounted for gas, took the total amount shown by the other companies and just gave the balance to the Consolidated.

Mr. Hayward: The amount shown by the other companies before there was a joint production, before gas was transferred from one company to another company, as I understand it?

The Master: Yes.

16976

Q. Is that correct, Mr. Woods?

A. That is right.

Q. Then as a matter of fact you must have subsequently determined after 1916 that you had been charging the other companies too much and the Consolidated too little; is that the fact?

A. The assumption was that they had their unaccounted for gas that they had when they went into the system, and after this period of years it was believed that some other method should be evolved, so that instead of having the Consolidated Gas Company take the balance, it would all be based upon some calculation.

16977

The Master: I don't think you answered the Colonel's question. The question was whether you found you were charging the Consolidated too little and the other companies too much.

The Witness: I cannot answer that.

Q. The balance to be charged to the Consolidated is a balance, is it not, Mr. Woods?

A. Not at the present time.

Q. Not at the present time?

A. No.

Q. It is not at all at the present time?

A. No.

16978 George E. Woods, Cross.

Q. If you knew what the other companies were losing, and if you knew what the total loss was, couldn't you determine accurately what the share of the loss of the Consolidated was?

A. If we knew, yes.

Q. Well, you know what the other companies were losing as shown by their own figures, don't you?

A. As to what they were losing back in 1910, a matter of 17 or 18 years ago, yes.

Q. And as a matter of fact you knew what the Consolidated itself was losing, didn't you, before that
16979 consolidation took place, even though it never has been made a matter of public record?

A. As of that time they must have had an unaccounted for gas, yes.

Q. And it was pretty near as low as two per cent, wasn't it?

A. Never. Prior to that time?

Q. Yes.

A. I am quite sure it was not.

Q. What was it?

A. I would not give you the figure, but I am quite sure that it was above six per cent.

Q. Were the figures higher than were shown and
16980 reported as being the loss of the Consolidated in the report to the Public Service Commission, and if so, why?

A. I don't think they reported to the Public Service Commission at that time, in 1901, and I am quite sure—I do not recall the figures, I have seen them, but I am sure they were over five per cent, I think they were over six per cent at that time.

Q. And yet in 1908, when you began making reports to the Public Service Commission, you reported that your loss was only 2.94?

A. That might happen. Temperature has a great

effect upon it. Just last night I made a rough diagram to show the effect of temperature on unaccounted for gas, and that was one of the reasons we changed this, because that has a material effect upon it. I simply drew up a rough diagram to show that the unaccounted for gas as of one year may change very materially as a result of atmospheric conditions, just a chart which simply graphically shows the range, how it runs as between temperature of the atmosphere and the—

Q. Now, in a cold year you would have a greater loss than in a warm year?

A. Yes. 16982

Q. And in the winter time you would have a greater loss than in the summer time?

A. That would be natural, yes.

Q. But the proportion of loss would range certainly not from two per cent to seven per cent, would it?

Mr. Ransom: I object to that question because in 1908, as has been pointed out, the system was not one of the separate ascertainment of the Consolidated's unaccounted for; it was simply a case of the Consolidated holding the bag.

The Master: I think that is a proper question on cross-examination. Would the range be as wide as from two to seven ordinarily, Mr. 16983 Woods?

The Witness: No, I don't think it would be that wide.

Q. That change in temperature, forgetting which year was a cold year and which year was a mild year, you don't contend that that is the reason for this jump from two or three per cent to seven per cent?

A. I think that had something to do with it, yes.

Q. Is that the main reason?

A. I think that has largely to do with it, because our unaccounted for as a whole has gone up, so that naturally the other would have gone up at the same time.

16984 George E. Woods, Cross.

Q. I see; and 1918 was a perfectly unprecedented winter in New York, so far as temperature was concerned, was it not?

A. It was very cold.

Q. The coldest, bitterest winter we have ever had in New York, to your recollection?

A. Yes.

Q. And the hardest and most extraordinary year on the gas business?

A. Yes, we had—

Q. So, if you base that seven per cent unaccounted
16985 for gas on conditions in 1918, the likelihood is that on the average run of normal years it will be away back down low again?

A. The unaccounted for in 1917 on the system was 7.35 and for 1918 it was 7.08. The average temperature for the year 1917 was a little bit lower than 1918.

Q. You would not say that those were normal conditions of winters in New York, would you?

A. Well, 1917—of course we had some cold weather in December. The year before that, as I recall, it was 5.66 in 1916.

Q. And what would be your estimate, supposing
16986 that this year should be an ordinarily mild winter, what would you say your loss would be, based on the same method by which you arrived at seven per cent?

A. Of course, we don't know what the conditions of the winter will be throughout the year, but I think somewhere between six and seven per cent, six and a half per cent.

The Master: The Colonel's question was, supposing this is a mild winter?

The Witness: My estimate is the unaccounted for will be around six per cent for the year on the combined system.

Q. So that the difference between an intensely cold winter such as 1918 was, and a mild winter, such as we have assumed 1919 would be, would only make a difference of one per cent or a little over?

A. An extremely mild year throughout the year might bring it down to five and a half per cent for the system, or five and a quarter.

Q. That would be a difference of one and one half per cent?

A. Yes.

Q. And a range of 1 1/2 per cent between the coldest winter and the mildest winter we would be 16988
likely to have in New York would be the maximum difference, would it?

A. We have been down lower. In the last ten years I think the minimum was 4.55.

Q. Well, you told me that your general rule was that percentage of unaccounted for gas went up on the length of mains compared with the number of consumers on those mains, didn't you? Have I made that clear?

A. No, I don't quite understand it.

Q. With very dense consumers, very dense territory, as you call it, you would have a very much smaller percentage of gas lost than one sparsely settled with 16989
long mains?

A. Yes, I testified to that yesterday.

Q. And by like token the Consolidated Gas Company has got two or three times as dense territory as any of these other companies, hasn't it, as shown by your reports?

A. The Consolidated Gas Company on that main mileage in some cases have as much as twice per mile of main as some of the companies, and some of the others it only runs twelve or fifteen per cent more per mile of mains.

16990 George E. Woods, Cross.

The Master: It is number of customers or volume of sales?

The Witness: Volume of sales.

The Master: I got the Colonel's question to mean that it was dependent on the number of consumers in a given territory.

The Witness: No, if you had a number of consumers that didn't burn any gas—

Q. I think it was my error. Ordinarily the density and the other would go together. The more consumers they had among people of classes about the same, the
16991 greater the number of consumers the greater the consumption would be?

A. What I refer to is the consumption per mile of main.

Q. Gas sales to the public per mile of main, that is what we are talking about—consumption per mile of main?

A. Right.

Q. Was more than twice as much as any other company except the Central Union, was it not, from 1907 to 1916?

A. I do not recall for 1916. That was not the case in 1917 or 1918.

16992 Q. I have not 1917 or 1918 here, but up from 1907 to 1916?

A. My best recollection Colonel, as I testified yesterday, is that some of the companies were selling about ten million to the mile and the Consolidated Gas Company about twenty.

Q. The Central Union was selling starting at ten and finally got up to sixteen?

A. I think they are doing between seventeen and eighteen. That is my recollection.

Q. And the Consolidated has been running along close to twenty all the time?

A. The figures that I had in mind were about twenty million per mile of main for the Consolidated, and some of the companies got down possibly as low as 9 1/2.

Q. And all the other companies except the Central Union were under ten?

A. I say in so far as 1917 or 1918 is concerned. I do not recall the 1916 figures, Colonel.

Q. If there is a ratio of loss between the other companies and the Consolidated, as you have testified, when you boost your percentage of unaccounted for gas to seven per cent, you must necessarily lower these 16994
other companies very materially; is that not so?

A. These figures were based upon the system as a whole; that is, the even per cent I used of the unaccounted for gas was throughout the entire system. The Consolidated system as of last year, 1918, was 7.08 per cent and for the year 1917 was 7.35 per cent for the entire system.

Q. Is anything, then to come off of that, to be charged to the other companies which furnished you gas?

A. No, that is based upon send out.

Q. That is the proportion charged to the Consolidated, estimated to be charged to the Consolidated, 16995
is it not?

A. That is the send out of all the companies compared with the sales and used of all the companies. The difference between the sales and used and the total send out of the combined companies, the unaccounted for gas, in the case of 1918, was 7.08 per cent.

The Master: That is not Col. Hayward's question.

The Witness: I did not understand it.

The Master: In the adjustments between the

various companies you take the figure of 7 per cent?

The Witness: Prior to 1918, your Honor.

The Master: What do you mean by prior to 1918?

Mr. Hayward: I thought he did it before 1918.

The Witness: Before 1918 some of the companies were taken at 7. I think one or two companies were taken at 8, one at 6.

The Master: In your calculations?

The Witness: These are the calculations that
16997 have been going on, your Honor, up to 1918. No, in my calculations that was not so.

The Master: I understood Col. Hayward's question to be this: When you adjust your unaccounted for gas with other companies on the basis of 7 per cent—

Mr. Ransom: They do not do that. The actual figures are not 7 per cent. That 7 per cent is only the figure he took for the purpose of his hypothetical—

The Witness: That is right, your Honor. We did not use any 7 per cent in making up these figures insofar as unaccounted for of these various companies is concerned.
16998

The Master: That is what I understood.

The Witness: Three per cent of the total send out was applied to meters, and the balance was prorated on main mileage.

The Master: In other words, as between your company and the other companies, in making a charge and adjusting accounts you take the actual unaccounted for gas?

The Witness: We did.

The Master: Of the whole system?

The Witness: Of the whole system.

Q. Then ought there not to be a credit against this 7 per cent for the share of that loss attributable to the other companies? Would you not think so, Mr. Woods?

A. I just do not—I want to answer you perfectly freely, Colonel, but I just do not understand your question.

Q. Why ought not the Consolidated, with the denser service and the greatest consumption per mile by two to one against the highest other company, have a lower percentage of loss, if that is a fixed rule, than the system as a whole which includes the other companies? 17000

A. They do.

Q. They do?

A. They do.

Q. Tell us what the figures would be for the system as a whole then, Mr. Woods, maybe we can get at it that way.

A. The figures for the system as a whole, for 1918, were 7.08 per cent.

The Master: What was the Consolidated for that year?

The Witness: The Consolidated I think, your Honor, was 6.11 per cent.

Mr. Ransom: Some of the other companies were as high as 9.11. 17001

The Witness: Some went up to 8 or 9 per cent.

Q. The total was 7.08 per cent?

A. Right.

Q. Would it not be fair, then to suppose on your fixed rule of consumption per mile that the Consolidated taken alone would only be about half as much as the loss for the whole?

A. I have testified just now, based upon main mileage, that the unaccounted for of the Consolidated Gas Company was 6.11 per cent for 1918, Colonel.

17002 George E. Woods, Cross.

Q. How did you get that figure? How do you know what it was? You did not measure it, did you, Mr. Woods?

A. No, no.

Q. You did not measure it, so it is a computation, is it not, and it is a computation which must be made on a fixed rule which you have told us here?

A. Right.

Q. Based on density of consumption per mile, or consumption per mile?

A. That was an item.

17003 Q. That was the principal item, was it not?

A. That was one of the elements. There were two.

Q. What was the other one?

A. The loss due to condensation.

Q. And in all of those items except consumption per mile the companies were about on all fours, were they not? I mean the temperature was the same in the Bronx as it was in Manhattan in the main, was it not?

A. Oh, yes we assume that.

Q. All those other features would apply practically the same to all the other companies, would they not?

A. Yes.

Q. So that the only controlling factor, according
17004 to your testimony, in which there was a difference between the Consolidated and the other companies, was consumption per mile?

A. Consumption per mile. It is based on consumption per mile for the unaccounted for due to mains.

Q. Yes right. So therefore with the total loss of 7.08 per cent and with the consumption, having in most cases twice as dense consumption per mile, why would it not be fair if it is only an estimate and if you must estimate according to that rule, to say that the Consolidated losses were only 3 1/2 per cent, they having twice as dense consumption per mile?

Mr. Ransom: I object to it.

The Master: I will allow it.

A. Because all of the unaccounted for gas is not attributable to main mileage. It is attributable to condensation, slow meters and different temperatures at the consumers' meters, which uses up 3 per cent of that 7 per cent.

Q. In which items and concerning which conditions the companies were practically the same all over this city?

A. Yes.

Q. Therefore that would be different, would it? 17006

A. That would have eliminated 3 per cent of the 7, leaving 4 per cent to be accounted for in main mileage.

Q. All right, take it that way. 3 per cent eliminated by these items that were the same, that would leave 4 per cent, would it not?

A. Yes.

Q. To be accounted for?

A. Yes.

Q. If everything was even as to consumption per mile that would be 2 per cent for each and that would bring the Consolidated down to 6 per cent, would it not?

A. I testified the Consolidated for 1918 was 6.11 17007 per cent, based upon those calculations.

Q. That would bring it down to 6 per cent, would it not—to 5 per cent, then, if you take the large density or consumption per mile—it would bring it down to 4 1/2, would it not?

A. It would not.

Q. Well, figures do not lie, Mr. Woods.

A. Well, go ahead and figure it.

Mr. Ransom: Here is the computation.

The Witness The computation is there. I have figured it and if you can make any different cal-

culation, Colonel, go ahead and do it. I have explained very thoroughly that the calculations I made I believe to be sound, and they were based, those calculations, upon my recommendation as to what should be done—what in my judgment should be done. That 3 per cent of the total send out should be attributable to slow meters, condensation and difference in temperature at consumers' meters, and the balance to be prorated based on main mileage.

Q. Did you think of all of those things prior to
17009 1916?

A. Did I think of it? I may have thought of it. We did not do anything with it at that time.

Q. No, and you kept on reporting the Consolidated losses lower than any one of these items you now tell us about?

A. And the Consolidated will be lower so long as their consumption per mile of main is greater than any other company. Their unaccounted for gas will be lower than any of the other companies.

Q. Just as it was shown in these prior years?

A. It will be lower, yes.

Q. But according to your figures .08 of one per cent
17010 lower?

A. I did not say .08. I said the average of the whole was 7.08 per cent.

Q. And you have given us 7?

A. 7 on the system; that the unaccounted for throughout the city was 7 per cent.

The Master: As I understand that exhibit it is this, that in figuring the cost of gas sold as distinguished from the gas made, he has taken the arbitrary basis of a loss of 7 per cent.

Mr. Hayward: For the Consolidated?

The Master: No, for this theoretical plant.

we will say. And he justifies that 7 per cent by the claim that that is the amount the experience has shown for the entire system.

Mr. Hayward: That is to say that he has testified that with this ideal plant of ten million capacity, that he could not make gas with less than 7 per cent unaccounted for and lost?

The Master: Yes.

Mr. Hayward: And I am showing, or trying to show, that as a matter of fact with the Consolidated plants, under the conditions they are in that it could not have been much more than 17012
3-1/2 per cent through all these years, including 1917 and 1918.

Q. Are you familiar with the claims made by the company in the former case? Are you familiar with the amount the company reported as having been lost, unaccounted for gas, in the year 1905, for instance?

A. I am not.

Q. If I refresh your recollection would you then perhaps remember that item?

A. I do not think I would remember it all, Colonel.

Q. Then Complainant's Exhibit 94, Consolidated Gas Company of New York, operations for the year 1905, I will ask you to look at that. 17013

Mr. Ransom: I object.

Mr. Hayward: I am not going to put it in the record. I will ask him to look at that.

The Master: He can have Mr. Woods look at it and see if it refreshes his memory at all.

Q. I will ask you to look at that and see if that doesn't refresh your recollection as to what you claimed for unaccounted for gas, excess of make over sales and used in the year 1905.

Mr. Ransom: I object to the question because—

17014 George E. Woods, Cross.

The Master: The question is, does it refresh your recollection?

A. It does not.

Q. You have now no recollection, after seeing that, of what the company claimed for loss by unaccounted for gas in 1905?

A. I haven't any recollection of it, Colonel, because I do not recall it at all. I don't remember anything about it.

Mr. Hayward: I understood the Master to rule we could not read any part of this case in
17015 the record here unless the witness identified it and was refreshed by it.

Mr. Ransom: I don't know of any such ruling.

The Master: Do you think it is permissible?

Mr. Ransom: On the basis which was then followed, I would be very glad to have it, as all that I object to is that counsel is proceeding on a false assumption. Of course, in 1901—

The Master: I will rule it out on my own notion, Colonel Hayward.

Mr. Hayward: I understood your Honor to so rule.

17016 The Master: It may lead to a lot of confusion.

Mr. Ransom: I am perfectly willing to let it in.

The Master: You are always willing to have something done when you know I won't let it in.

Mr. Ransom: If counsel will consent.

The Master: No, I will not let it in. Now, you have shown here for renewals and replacements an item of 3-1/2 cents—

The Master: Of course, Mr. Hayward, to interrupt you, any statement made by this company at any time or place, properly proved, can probably be put in as an admission against interest.

Mr. Hayward: Well, yes, but I understood not in the cross-examination of this witness.

The Master: No.

Mr. Hayward: It could only be if he happened to remember having seen those figures.

Mr. Ransom: I will consent to it. The Master says he doesn't want it in now, or I would be glad to put it in.

Q. Under this estimate of yours, Mr. Woods, of coal gas costs, you have renewals and replacements at 3-1/2 cents per thousand cubic feet. Do you recall that item? 17018

A. Yes.

Q. And that does not include repairs, does it?

A. No.

Q. It is the same item that is ordinarily spoken of and is used in the Uniform System of Accounts, is it not?

A. Renewals and replacements: I don't know whether it is in that account or not.

Q. Now I will hand you Uniform System of Accounts, Gas Corporations, page 49, item G 842, General Amortization, Gas, and ask you to read that item, as well as note A under it, and then tell me if this item that you have charged 3-1/2 cents for renewals and replacements is the same item as referred to in that portion of the uniform system of accounts? 17019

Mr. Ransom: I object to the question as incompetent.

The Master: It is allowed. Why isn't it proper for Colonel Hayward to identify that item as an account kept in accordance with the uniform system? If the results vary from the report required under the uniform system, why, it is not a proper report.

A. I don't know whether it is set up in the books.

The Master: Let me see that, will you? Do you want to use it?

Mr. Hayward: No, sir (handing book).

Q. Well, you notice in there that that provides, Mr. Woods, for a filing in the report of the company, the annual report of the company, of an amount considered sufficient to take care of replacements and renewals?

A. Yes.

Q. And that being the same item that you have put in your schedule here at 3 1/2 cents per thousand cubic

17021 feet?

A. Yes.

Q. Do you know as a matter of fact that in 1915 the company reported, pursuant to that provision of the uniform system of accounts, a sum of 3 cents per thousand cubic feet as being sufficient for renewals and replacements?

A. I do not know what they reported, Mr. Hayward.

Q. Well, I will tell you that that is the fact, that they did. And you notice in there that in order to change that amount—

Mr. Ransom: One minute. I doubt whether counsel can make that statement, which I do not

17022 believe is true.

The Master: You mean is correct?

Mr. Ransom: Yes.

The Master: Well, I think it is—nothing gets me so mad as to hear someone say I am not telling the truth.

Mr. Hayward: Well, I think I am both true and correct.

The Master: What is the use calling people liars when what you mean is that they are not accurate. Now isn't the report here?

Mr. Ransom: It is.

The Master: Well, let us have the report, then we won't have any arguments about it.

Mr. Hayward: Yes. I hand counsel the excerpt from the report, from the minutes of the meeting of the executive committee of the board of trustees of the Consolidated Gas Company of New York at a meeting held on October 26, 1915, certified by Mr. Carter who is sitting here certifying the foregoing to be a true and correct excerpt from the minutes of the aforesaid meeting, in which a sum equal to 3 cents per thousand cubic feet of gas sold during that month should 17024
be credited to renewals and replacements account.

Mr. Ransom: Yes. That don't say that the company certifies that 3 cents was enough.

The Master: No, but it is a statement by the company.

Mr. Hayward: Well, it certainly is.

The Master: And I think it is a fair presumption that the company thought it was enough.

Mr. Ransom: Oh, no.

The Master: A fair basis of argument at any rate.

Mr. Hayward: And I want to ask Mr. Woods this question: 17025

Q. If as a matter of fact there is a clear provision there that if at any time that seems to be insufficient, or should be larger, based on the experience, that fact must be shown in a subsequent amendment filed with the Public Service Commission. That is true isn't it, Mr. Woods?

A. I read that, yes.

Mr. Ransom: I object to the question. This goes to a very serious question as to the commission's legal power.

The Master: Overruled. That book is in evidence.

Mr. Ransom: It is a very serious legal question as to the commission's power and as to the validity of this provision which has been very vigorously litigated, fought out in—

The Master: I don't think it lies in your mouth to question the power of the commission to make this rule when you offered the rule in evidence.

Mr. Ransom: What Mr. Hayward is endeavor-
17027 ing to do is to have the engineer of manufacture pass on a question of law which neither Col. Hayward nor myself have been able to decide as lawyers.

The Master: No. Col. Hayward is bringing out the point, and I think it is brought out sufficiently from this witness, that as against this witness's statement that in his opinion and based upon his calculations of renewals and replacements of 3 1/2 cents, this company by formal resolution has fixed it at 3 cents.

Mr. Hayward: Based upon expert opinion?

The Master: Yes, 3 cents.

17028 Mr. Hayward: It must be based on the expert opinion.

The Master: I think that is a proper thing to have in the record.

Mr. Ransom: There was a statement of the reserve filed in 1915.

The Master: That is a matter of argument as to what the result will be. Offhand, without knowing anything further about it, if this case turned upon that one-half of one per cent per thousand feet as shifting the case from one side to the other, I shall rule against the gas com-

pany. That is the way I feel about it. If the case ever got as close as that, that would be my view of it.

Mr. Hayward: I would like to ask the witness one more question before we leave it, if the Master please, and that is:

Q. Whether or not you know as a matter of fact that that never has been changed on any of the subsequent reports; that it is still 3 cents?

Mr. Ransom: I object to the question from this witness. Mr. Brundage is the next witness who will be asked about those things. 17030

The Master: I am going to take it. If Woods knows I will take it.

Mr. Ransom: Exception.

Mr. Hayward: I asked him if he knows?

A. I do not know.

The Master: I think counsel for the complainant probably knows, and if it is the fact, it will be conceded and will save us a lot of time. Has that been changed, Judge Ransom?

Mr. Ransom: Well, that involves quite a long record which I would not undertake to make a statement on.

Mr. Hayward: There is no amendment, your Honor, as shown and required here (indicating uniform system of accounts). 17031

The Master: The record will have to speak for itself. I have tried to save time. You have made your point, and it is clear what that point is.

Mr. Ransom: This is a statement on the basis of a reserve which they tried to set up for the commission a long time ago, and not what it actually does cost.

The Master: I have got to analyze these figures and reach a result from every possible

angle, and that is why I have been anxious to get it. If there was nothing else in this case, and the whole case turns on this, and I had nothing else, as I said before, I would probably rule against you, but, of course, there are many other elements to be considered, and I may finally reach the conclusion that the only safe guide is actual experience, actual operating results. I don't know, but I want to get everything.

Mr. Ransom: But if during the years since 1916, as well as before, it appeared that 3 cents
17033 was not enough, the mere fact of the filing of a rule in temporary compliance with the commission's requirements in that respect would not prove the actual figures.

Mr. Hayward: Well, one of two things are true, either this company has been under-placing their renewals and replacements to make this Public Service Commission report, or they have inflated it now for the purposes of this case. And I did not intend to make any speech, but if the Judge is through with his argument, I will take the thing up. There isn't any escape from this proposition that either they have been
17034 underestimating this when it was to their advantage to do it in this report, or they are now overestimating it for the purpose of this case, as we contend they have done, in representing unaccounted for gas.

The Master: The answer is that with a very few questions you have brought out a point. Now let us get along.

Mr. Hayward: Well, just make Judge Ransom sit down and let me go ahead, and I will be through very quickly.

Mr. Ransom: It is a model of what cross-examination may be.

The Master: That is correct. Bring out your point.

Q. Mr. Woods, you have told us about the growth of the Astoria plant and the building up of the two systems there; that is, for the manufacture of coal gas and for the manufacture of water gas. Am I correct in understanding your testimony that it takes about three or four times as much gas to enrich water gas to the required candle power as it does to enrich coal gas to the required candle power? I mean speaking generally, not down to the very finest points of it. Would that be a fair rule of thumb, 17036
we will say?

A. I testified it would take 1.6 gallons of oil, using carbureted water gas, to enrich coal gas to bring it to a commercial gas of 22 candles, and 4.1 gallons of oil to make a commercial water gas on the system.

Q. So that I might safely say that a rule of thumb would be that it would take three times as much oil to enrich the water gas as the coal gas?

The Master: No.

The Witness: It would not be three times.

Q. Well, why not?

The Master: Because the coal gas starts out 17037
with 14 or 15 or 16 candle power.

Mr. Hayward: Oh, I understand that.

The Master: If you say—

Mr. Hayward: But ignoring the other elements for the time being.

The Master: But you see your rule is not correct. What this witness has said is it takes 4.1 gallons to make approximately 24 candle water gas, and he takes 1.6 gallons of oil in this water gas to bring coal gas up to that same equivalent of 22 candles when it is all mixed.

17038 George E. Woods, Cross.

So that it does not follow; it does not mean three times as much to enrich coal gas.

Mr. Hayward: Well, two times then.

The Master: No. You have got to get down first to your basis of coal gas at 16 candle power and water gas of a certain candle power.

Mr. Hayward: Well, I say ignoring the other elements. Well, put it this way, Mr. Woods.

Q. As the price of oil goes up by leaps and bounds, it increases the cost of manufacturing water gas very much more rapidly than it increases the cost of
17039 manufacturing coal gas, doesn't it, if coal and the other items remain the same?

A. If coal and the other items remain the same, why, the more you pay for oil, the more water gas would cost. The same thing would apply in bituminous coal, if it went up very high and oil remained the same, then coal gas would be very much higher.

Q. Very much higher. So that in the main the increasing oil increases the cost of water gas and the increased cost of coal increases the coal gas?

A. That is right.

Q. They being the principal ingredients, we will say?

17040 A. Yes.

Q. Your company has reported to the Public Service Commission the costs of manufacturing coal and water gas over a period of years has it not?

A. Right.

Q. Do you recall that the figures for coal gas in 1916, manufacturing alone, coal gas in 1916 was 17.48?

A. I do not recall the figure.

Q. Suppose we get those reports so you can have them right before you. I direct your attention here to this column on the bottom line, Astoria plant, coal gas, 1916, 17.48. Is that right, Mr. Woods?

A. That is the figure that is here, yes.

Q. Well, that is in the report?

A. Yes.

Q. And presumably it was right. You did not intend to file anything that was wrong, did you?

A. I think not. I didn't file it.

Q. Now, look under the water gas column for that same year and see what it is, see if it is 23.07?

A. Right.

Q. Now, take the next year, 1917.

The Master: Does that include items of oil enrichment, Mr. Woods? 17042

The Witness: Just how much enrichment is in that I don't know, your Honor.

Q. Does it include iron oxide, city water, and the like?

Mr. Hayward: I think so. It says, "Total Net Cost,"

The Master: I wanted to get it clear. Does it include repair labor and repair material?

The Witness: Yes, that is apparently here.

The Master: In other words, that 17 cents is the figure covering the same items as you gave me on coal gas, 53 cents cost of making, 57 cents cost of gas sold.

17043

The Witness: That would be as of that time.

The Master: 1916?

The Witness: Just what enters into that—I was just trying to refresh my memory on this particular thing.

Q. All right, take all the time you want, Mr. Woods?

A. My recollection is that up to—I would have to verify that to some extent—

Q. I will tell you in advance that I am going to ask you about the other two years, 1917 and 1918, so if it has any bearing on that it will come out. Now, go ahead, Mr. Woods.

17044 George E. Woods, Cross.

A. My recollection is, and the accountants could probably tell you that better than I could, that for a period of years—and whether that was terminated in 1917 or 1918, I don't recall that there was a time that the coal gas enrichment, as made at Ravenswood, was charged to coal gas production; but for the enrichment as made at the Astoria plant, it was not segregated. In other words, they simply charged that all in to water gas production and did not debit the coal gas with the amount of oil that had been used in the water gas plant. Whether that has been changed or not, I don't
17045 know. They made the purchase from the Ravenswood Company, New Amsterdam Company, and put that in their costs, but in the water gas costs they did not segregate the coal gas enrichment. I am not sure whether that was done or not, but I see a figure here of $118,000, which would indicate Ravenswood enrichment without any from Astoria. The accountants could tell you better on that than I can.

Q. Let us take the next year, 1917. I will ask the witness to examine that report and see if the same figures come under the same conditions testified to, the same explanation, if the coal gas figure for 1917 is 18.50, and the water gas 32.66?

17046 A. Right.

Q. Now, turn to the 1918 book, and see if the price of coal gas, the cost of coal gas there is 28.65, and water gas 42.99?

A. Right.

Q. Now, the company has offered here an exhibit, Mr. Woods, Exhibit 326, showing the prices paid for gas oil, and the quantities of the same used by the company from the years 1906 to 1918, eight months of 1919. You know in a general way perhaps, how these prices have ranged?

A. In a general way; I don't recall them at the moment.

Q. As a matter of fact gas oil was steadily going down and was being bought cheaper every year up until the time the great war started in Europe, isn't that so?

A. I don't recall just the trend.

Q. As a matter of fact, I show you this exhibit—as a matter of fact, in 1906, oil cost .0457?

A. Yes, I see that.

Q. And it gradually ran down until the effect of the war presumably began to be felt, the low price of oil being in 1915, and 1916—isn't that so, when it was a trifle over three cents a gallon?

A. Right. 17048

Q. Now, under ordinary probabilities, but for the intervention of the unusual conditions resulting from the war, that oil would have continued at that level or gone progressively lower?

Mr. Ransom: I object to that as incompetent.

The Master: I think it is problematical.

Mr. Ransom: You would not let this witness testify on price matters. We would have been glad to have him do so.

The Master: I will sustain the objection.

Mr. Hayward: You would not let us ask that question of Mr. Addicks. You said, wait until they get an expert.

17049

The Master: I probably sustained it for the same reason I do now, that it is argumentative.

Q. Now, the fact remains that the price until these war conditions were felt was going steadily down, is it not, until 1915-16?

Mr. Ransom: I object to that.

The Master: I will allow it.

A. The price was low in 1916, as compared with subsequent years.

Q. I show you this exhibit—starting with 1917, the price of oil went up at an unprecedentedly rapid rate,

jumped to .0498 in 1917, .0656 in 1918, and to .0685 in 1919. That is shown by that exhibit, isn't it?

A. Yes, those are the prices on the exhibit.

Q. Therefore, your costs of your water gas and your coal gas, but to a lesser extent, were going up in proportion to those leaping oil prices, were they not, Mr. Woods?

A. They might not go up in the same proportion. Where you used oil for enrichment it would.

Q. You did use oil for your enrichment in every water gas plant, did you not?

17051 A. Yes.

Q. It was an essential?

A. Yes.

Q. And the biggest thing you had to contend with in water gas production?

A. In water gas, yes.

Q. As a matter of fact with the cost of your water gas increasing more rapidly than the cost of your coal gas, your company steadily, the last year or two, has been increasing the manufacture of water gas and decreasing the manufacture of coal gas, has it not?

A. We have made the gas dependent upon the coal conditions and labor conditions. If we could get the

17052 coal and could get the labor we made as much coal gas as we could make, as we could possibly make under the conditions under which we were operating. That was the only thing that kept us from it. There were periods of time when we could not get coal and there were other periods when we could not get labor. During 1918, the United States Government was using part of our coal gas plant and were anxious for us to make water gas as a matter of toluol production. They were using a part of our coal gas plant for the purpose of making a carbon for the gas masks to be used on the other side, with the request that we make as much water gas as we possibly could.

Q. That was the year of our entry into the war, 1917-1918?

A. They worked both in 1917 and 1918. We were short of coal at some times. 1918 showed a reflected condition as to the cost as compared with water gas, and the condition as of today is just the reverse.

Q. All those conditions arose because of the war—all that you have named certainly did?

A. I suppose the war had something to do with it, naturally.

Q. Then why did you start to increase your water gas manufacture steadily in every plant and decrease 17054
your coal gas manufacture steadily in every plant—a process that never let up until today—five years before the war started?

A. Because of our inability to dispose of coke was one reason, and the inability to maintain candle power, and if we had gone ahead and made large quantities of coal gas and not been able to dispose of the coke. To maintain candle power, that was the only reason.

Q. The figures shown by your reports, Mr. Woods, show that Astoria in 1911—these are in units of a thousand, I presume—made 4,313,616 coal gas in that new plant at Astoria in 1911. That drops down here to 3,068,000 between those years?

A. Possibly. 17055

Q. At the same time in water gas in 1912, out at Astoria you only made 2,439,133, whereas in 1918, you had gotten up to 6,670,000?

A. What year was it 2,000,000,000?

Q. 1912.

A. It was not started until the middle of May in 1912.

Q. Well, in 1914, you made four million and something.

A. Four billion.

Q. Which had jumped in 1914—that was before the war—and in 1918, you had jumped to nearly 7,000,000, had you not?

A. I do not recall the figure. Six billion, probably.

Q. Six, five, three—over six and a half. That was at Astoria. Your 14th Street and 42nd Street plants used to make a good deal of coal gas, did they not?

A. At one time.

Q. And starting long before the war, years before the war, you began to decrease the output of those coal gas plants and tapered it down until now it is noth-

17057 ing, practically?

A. We are not making any gas there at the present time.

Q. And there was a steady decrease in each year starting in 1911, was there not?

A. As we read the make at 14th Street and 42nd Street my recollection is it was about 19.7, and that make was 1907 to 1915, and there was not a very great difference in any one year. There were some few millions probably, but not a great difference. That is my recollection now.

Q. Then you began to abandon them entirely?

A. Then we closed them down and only lighted

17058 them up during the winter months.

By the Master:

Q. Have you got on the record here the total capacity of all the Consolidated and allied plants?

A. We have, your Honor.

Q. Roughly speaking how much is it?

A. 175,800,000 I think is the correct figure.

Q. What are the requirements, approximately?

A. The actual send-out has been in excess of 150,000,000. Our reserve over our actual send-out is about 25,000,000 cubic feet, which is less than the capacity of one of our largest plants.

Q. Does that capacity include these coal gas plants that Col. Hayward is talking about?

A. 14th Street and 42nd Street?

Q. Yes.

A. It does.

Q. What is the capacity of those?

A. Nine and a half million.

Q. Together?

A. Together.

Q. And you have got in all the plants a reserve producing capacity of 25 per cent more than your requirements? 17060

A. 17 per cent.

Q. 17 per cent more than your requirements?

A. 25,000,000, your Honor.

By Mr. Hayward:

Q. What did you say about 150,000,000 being your send-out?

A. Daily send-out maximum daily send-out.

Q. That is the maximum?

A. Yes.

Q. Not the average?

A. No, but you must have plant capacity to take care of your maximum conditions, you know.

Q. Certainly, I understand that; but I am just trying to get it straight. What is the average? 17061

The Master: About, Mr. Woods.

Mr. Hayward: Yes, about.

A. I cannot recall the figure. I do not just recall what it is, your Honor. I do not know whether I have it here or not.

The Master: I asked those questions, Colonel, and I think perhaps you ought to know what is in my mind. I have been wondering what the reason was for keeping on these plants, and I assume their claim to be from something that was said that they are needed for a reserve plant.

17062 George E. Woods, Cross.

Mr. Hayward: I want to go a little farther with that.

The Master: That is why I asked the questions I did—to see just what that meant.

Mr. Hayward: That is the reason I asked this question. We will contend—well, I do not need to make a speech on that.

The Witness (examining paper): I have not got that figure here.

Q. Can you give us the minimum. You gave us the maximum, now could you give us the minimum?

17063 A. The minimum send-out?

Q. Yes.

A. Oh, that would go down to forty-five million on a hot summer's sunny day, probably.

Q. So that the thing would range from forty-five to one hundred and fifty?

A. Right.

Q. How often would you reach anywhere near this maximum or this peak load of one hundred and fifty million?

A. In cold weather it might last us a week.

Q. For a week in cold weather?

A. Yes.

17064 Q. Your extra service or reserve service as you call it, or whatever you do call it, is how much in excess of that maximum?

A. Seventeen per cent over one hundred and fifty million. Our capacity is one hundred and fifty million and seventeen per cent reserve, and that twenty-five million or 25.8 is including 14th Street and 42nd Street, less than one of our largest units like the Ravenswood plant or the water gas plant at Astoria, or the 21st Street plant, and if we should have any of those plants go down at the peak load—and those are the times you are operating under the greatest strain—if

anything should happen we would not be in a position to supply the gas. Our reserve should certainly be equivalent to our largest individual unit.

The Master: The gas companies generally do not carry reserve plants, do they?

The Witness: They have reserve capacity, your Honor. We had not the capacity, of course. We are combined, but we have a lot of these plants.

The Master: If an accident happens to one of the works in one of the smaller towns throughout the country, or blows up that plant, that ends their service, does it not? 17066

The Witness: It closed them up. You would not want us to do that here.

Q. As a matter of fact, when you tried to get these idle plants at 14th Street and 42nd Street into action at the time you needed them most in this city it took you three days to get them going, did it not?

A. Yes, and it might take us longer.

Q. It cost $26 per thousand cubic feet to make the gas in them then?

A. Right. We made very little gas, but we had them ready to start operations.

Q. That is your stand-by service that you think it is necessary for this company to have? 17067

A. Certainly.

Q. A service that takes three days to get into action?

A. Yes.

Q. And then costs $26 a thousand cubic feet to make the gas.

A. Well, if those plants should be eliminated, what the Consolidated Gas Company would have to do would be to build or provide facilities to that extent, or purchase them from somebody else.

Q. But if the Astoria plant was shut down these others would not afford very much relief, would they?

17068 George E. Woods, Cross.

A. To the extent of their capacity. No, they would not. That is the reason I say we have not sufficient reserve. We have not enough.

The Master: How does that figure of $26 a thousand cubic feet arise?

Mr. Hayward: I have had it figured out, and I will put it in evidence. If figured $26 a thousand cubic feet.

The Master: You mean taking the overhead and everything, the invested capital?

Mr. Hayward: No, the actual cost. They have
17069 not got a contracting firm to go in there and make the gas, your Honor.

Mr. Ransom: They have to have the fires up and to keep them banked, to have them up to the proper temperatures before they can start operation, so that if you fire up in November or December, for example, and do not start turning out gas until January or February—

Mr. O'Brien: Would it not be a good thing to have Mr. Ransom bring that out in his re-direct, through his witness? Let us have it on the record right.

The Master: It would be a good thing if you
17070 let Mr. Ransom tell me something when I am trying to find out in an offhand way.

Mr. O'Brien: We might have a chance to get it in the record of this case then.

The Master: I am trying to find out how this $26 a thousand cubic feet comes in. I was wondering whether it was a mistake or whether Col. Hayward really meant $26 a thousand.

The Witness: We might light up those benches and have them ready for operation and not make any gas in them at all; or we might make 10,000 feet, in which event the gas might cost us $100 a thousand.

Mr. Ransom: Let me correct this. The figure seems to be not as much as has been indicated, although it is a very large figure.

The Master: I did not catch that $26 a thousand, that is all. I can see where the expense might be large.

Mr. Hayward: $16, I guess it is. It is $34 in one place.

Q. And that shows, does it not, Mr. Woods, that it is not fair to take any particular emergency period of time to predicate the cost of gas on?

The Master: I do not think I will allow that. 17072
That is argumentative.

Q. Mr. Woods, it takes about two weeks to get one of those coal gas plants going right, does it not, after it has been cooled?

A. Right.

Q. But you can get a water gas plant, if you had that in reserve—get that into action in about 24 hours, can you not?

A. Much quicker than the coal gas.

Q. So that, to sum up this thing, with the cost of water gas increasing more rapidly than the cost of coal gas you have increased your manufacture of water gas and have decreased your manufacture of coal gas; you have kept your coal gas plants in reserve, notwithstanding the fact that it took two weeks to get them into action, and you have not kept in reserve your water gas plants which took 24 hours to get into action. Is that a fair statement, Mr. Woods? 17073

A. We did not run 14th Street and the 42nd Street because they are not economical plants to operate, and if we had operated those plants they would have considerably more than the production of water gas.

Q. But it would not have cost you more to produce coal gas at Astoria than it did to produce water gas, or anywhere near as much, would it?

17074 George E. Woods, Cross.

A. To a certain extent, no, depending on the amount, as to whether we could dispose of our residuals. If we made a lot of gas there and could not dispose of our residuals and had to get rid of them at any price.

Q. What do you mean by residuals—coke?

A. Coke, tar, ammonia.

Q. Have you ever had any trouble in selling coke?

A. Yes, and we have had a lot of trouble.

Q. And you have had a lot of trouble buying it, have you not?

A. No.

17075 Q. You always could buy it?

A. No, there have been times when we could not buy it and there have been times we had shortages of coal. Away back in 1902 I can recall that condition.

Q. As a matter of fact, you bought coke yourself, did you not, from outside concerns?

A. At times we have, yes.

Q. And the coke market is not steady, it fluctuates greatly?

A. It is very difficult to dispose of coke in New York City in competition with anthracite coal. There are a great many people who come to New

17076 York and say why, the Consolidated Gas Company ought to sell all kinds of coke here, here is a great big town that can take coke. As a matter of fact, it is an apartment house proposition almost entirely, and you have to compete with a very common fuel like buckwheat, and if we did that the cost of coal gas would be very much higher. That is the reason we restrict the amount of coal gas as far as sales are concerned, so that we can use it in water gas production and not pile up a lot of coke at the plants with twenty or twenty-five per cent loss in price and cannot get rid of the coke.

Q. Of course, as a matter of fact it is true, is it not, Mr. Woods, that the company never has attempted to build up a market for its coke—never has devoted anywhere near the time and the thought to that that they have, for instance, to the development of the water gas manufacture which used up all this oil? Isn't that true? 17077

A. Oh, yes, they have. They organized the National Coke & Coal Company for the purpose of disposing of their coke.

Q. But notwithstanding the difficulty that you have had to market your own coke there have been a good many times when you have had to go and buy coke from other people yourselves? 17078

A. We have, due to our inability to get coal at the same time, soft coal, so that we could make our own coke. In the spring of 1917—I think it was in March, 1917—where we ordinarily ought to have one hundred and twenty-five or one hundred and fifty thousand tons of bituminous coal on hand we actually had 17,000 tons on hand, which was only good for about twelve days.

Mr. O'Brien: You mean 1918, or 1917?

The Witness: I mean in the spring of 1917. That was the year. The difficulty is we are buying coal on the market this year and last year there was an inability to get coal. 17079

Q. You bought coke this year, did you not?

A. Yes, we bought coke this year.

Q. You bought it practically every year, did you not?

A. No, we do not.

Q. You bought it this year?

A. We bought it this year.

Q. You bought some last year?

A. We bought it last year, yes.

17080 George E. Woods, Cross.

Q. You bought some the year before?

A. I do not recall whether we did. We bought some coal or coke from the Seaboard By-Products Company, which is an oven coke and not a gas house coke.

Q. And whenever you bought it you credited yourselves with more on this exhibit, did you not, than you paid?

A. Whatever we brought it at it is on that exhibit at.

Q. Whatever you could sell the coke for appears
17081 as a credit put down on this exhibit, as a credit in the manufacture of coal gas. You have given it as a credit of less practically than you have paid?

A. We gave a credit on that as to what that coke was worth to us as generator house fuel. That is the price compared with anthracite coal.

Q. That is a price less than what you actually paid for the coke when you bought it yourselves?

A. It might have been.

Q. Well, was it?

A. I do not recall what the price was, but an oven coke is different from a gas house coke. You do not have the breaking and it compares more favorably
17082 with anthracite coal. It is a coke that is an eighteen or twenty-hour coke, where ours is a six or eight.

By the Master:

Q. Let me ask you this, Mr. Woods, as I have never had this clear in mind: Coke is made from soft coal, is it?

A. It is, your Honor.

Q. What is extracted from the bituminous coal in the gas operation?

A. Coke, tar, ammonia and cyanica. Those are the by-products.

Q. What do you do, extract the gas?

A. From the coal?

Q. From the coal?

A. Yes, that is a destructive distillation.

Q. And that leaves still a heating power in the coke, does it?

A. Oh, yes, all the fixed carbon is in the coke.

Q. That remains there?

A. Yes.

Q. The extraction of the gas does not hurt the heating value of the material that is left?

A. Oh, yes, it affects the heating value, because all 17084
your hydrocarbons have been removed. But there is a heating value in your coke. If this coke were free from ash or impurities, it would be pure carbon and have a value of something like 14,000 or 14,000 B. T. U.'s per pound if it were pure. All the ash, however—for instance, if you take one hundred pounds of coal, which would run seven to eight per cent ash, from which you would get 67 pounds of coke—if you had eight pounds of ash in the coal you would still have that eight pounds of ash in the coke, you understand, so that the percentage runs much higher in the coke.

By Mr. Hayward: 17085

Q. That is the reason that coke is light—so much lighter than coal?

A. It is.

Q. Because of the gas and these other things that have come out?

A. For instance, you can put the coal in a retort, and we will say that it will occupy sixty per cent of the space in the retort; you put it under the fires there and keep it from six to seven hours, depending on your conditions, and when you push that coke out, instead of occupying sixty per cent it will be

17086 George E. Woods, Cross.

nearer seventy per. It swells. Some swells more than others.

Q. It is sold on weight, of course, more than anything else?

A. On weight, yes.

Q. And the lightness of it simply increases to some extent the facility of handling?

A. And friability.

Q. And friability?

A. In a coke oven proposition we might put in half a ton of coal in a retort, or incline and they will
17087 put fourteen tons in a receptacle, which, on account of its density and the weight of it and the time of it, compresses it and makes a harder and less friable coke, higher specific gravity, and it does not break up like the other. The coke oven proposition, however, instead of getting in the ordinary coke oven plants—they use about fifty per cent of their gas to heat their ovens, so that instead of getting five cubic feet to the pound, they get two and one-half cubic feet. It is a coke proposition, and not a gas proposition.

Q. As a matter of fact, Mr. Woods, notwithstanding your claim that you could not sell your coke, there
17088 is a great big concern that has gone into business in this territory in the last two or three years, called the Seaboard By-Products Company?

A. Yes, and they are having the devil's own time to get rid of it, I will tell you. They were having happy days when the war was on, and they are very unhappy today, and I think before they get through with it, they are going into water gas to help out, and they have raised the price to the Public Service Commission, I think fifteen cents per thousand feet on their gas, in order to make both ends meet.

Q. But they are making coke?

A. You bet, because they have a contract, and they are in a pretty bad way. They came around begging us to take some of the coke off their hands. They have 150,000 tons over there and don't know what the devil to do with it.

Q. And when you buy, you buy of them?

A. We had a contract with them two or three years ago, we were trying it out, and we are using some of that coke, we are using a small amount. I will tell you what actually happened at the time. They made us a price, and at the time we thought it was a fair price. Subsequently the government 17090
refused to let them deliver and they had a big market for coke, and they said they would pay us so much money per ton, not to make deliveries to us, make deliveries to somebody else and give us a credit. We had plenty of coal, and the United States government didn't want us to take it, and they were on easy street and having a fine time until the war went bust, and they are practically in the same position now.

Q. And that was entirely as a result of the war. In normal times they were getting along fine?

A. They are going to have a lot of trouble over there, and they didn't realize it.

Q. In normal times, before the war condition 17091
struck this country, before we went into the war, they were having a good time and selling their coke?

A. They didn't start until about the time the war started on the other side.

Q. I mean until we got into the war.

A. They were running in a small way, to what extent I don't recall.

Q. There was a fine market for coke, wasn't there?

A. They developed a market for the time being, but they are trying to sell to gas companies, because they can't get rid of the coke.

17092 George E. Woods, Cross.

Q. A condition which continued until the war conditions hit this country in 1917 and 1918?

A. You go over and talk to those people; they will tell you the story.

Q. I want you to tell us what you know about it.

A. I am telling you, and I am telling you the truth, too.

Q. In all parts of the United States they make coke oven gas?

A. Surely they do; they do it in iron districts
17093 around Chicago and around Pittsburgh, et cetera, where they can sell to the steel companies, and the steel companies have much of it themselves. It is a coke oven proposition, and they do it for that purpose, and have to use the gas for running their engines and some of their mills. In some cases they have an excess and sell some to the cities. We are not in an iron working district.

Q. As a matter of fact, that is not true in towns like St. Louis, Minneapolis, Milwaukee, and those places, is it?

A. St. Louis is an iron country. They have facilities down there for getting rid of their coke, and
17094 so have they in Minneapolis.

Q. There isn't a pound of steel made in St. Louis, is there?

A. They have rolling mills, et cetera, they had, and I presume they have them today.

By Mr. O'Brien:

Q. Where?

The Master: Don't answer Mr. O'Brien's question. Do the river boats on the Mississippi use coke?

The Witness: I am sure I don't know whether they do or not. Neither of those places has the

competition with anthracite coal that we have. At any rate, whatever they may have in St. Louis or Minneapolis or some other place, we have tried very hard to get rid of our coke, and get rid of it at a price. You can give anything away, but you have got to get a fair price for it to make a profit.

Q. Well, you could sell it at a considerably reduced price below what you have ever sold it for, and still make coal gas cheaper than you are making water gas today?

A. Absolutely not; and if we got a better price 17096
we would not make it as cheap as we are making water gas today.

Q. Well, your figures don't show it?

A. Every time coal gas goes up ten cents a ton it makes a big difference, and if these men are going to work six hours a day and five days a week, then the best thing we can do is to shut down our plants as quickly as possible and use them for reserve, notwithstanding the fact that it takes two weeks to light them up.

Q. And in 1919 you have a rate case on, which you didn't have in other years?

A. Well, I don't know anything about a rate case; 17097
I am glad to get away from it.

Mr. Hayward: That is all.

The Master: You are excused.

Mr. Chambers: Just a moment, will you hear me? Those questions you ruled out, you said you were not interested in B. T. U.'s I have here an order of the Public Service Commission. I ask that the witness stay just a minute.

The Master (to the witness): Just wait.

Mr. Chambers: The Public Service Commission on the 13th day of October, 1917, I think

while counsel for the complainant was counsel for the Public Service Commission, made an order fixing the heating standard for gas.

The Master: I don't care what they did: the statute says it is twenty-two candle power.

Mr. Chambers: I know, but it is a war emergency measure and is still in force and effect, and we are going to base our case on that—

The Master: No.

Mr. Chambers: We would like to have Mr. Woods tell us what the B. T. U. was of his

17099 gas.

The Master: No, I decline to change my ruling.

Mr. Chambers: You will see by this—

The Master: I am taking your statement that there was an order.

Mr. Ransom: During the war, by reducing the price.

The Master: You can mark that for identification, if you like, and I will stand by my ruling.

Mr. O'Brien: At this time I want to move again that Exhibits 351 and 352 be stricken

17100 from the record on the grounds that I stated yesterday, and on the further grounds that the examination of the witness Woods, having been completed, it appears that there is no foundation for his hypothetical figures; that at least a dozen items contained thereon pertain to and embrace matters concerning which he has shown no qualifications as an expert and no connection in an official capacity in the employ of the company and its affiliated companies.

On the further ground that without the analyses in evidence upon which he bases these

general statements and general observations as to the hypothetical cost of making gas, his hypothetical figures are of no value, even though they were admissible. That the witness has attempted to substitute through these exhibits and his testimony concerning them, an expert opinion for concrete testimony upon the concrete facts, as shown by the books and records of the company, and the experiences of the employees of the company during the period covered by these exhibits.

The Master: Motion denied. 17102

Mr. O'Brien: Exception.

Mr. Chambers: First, I want to offer in evidence this order of the Public Service Commission dated October 13, 1917, Case No. 2235, order for one heating standard for gas, counsel for complainant being counsel for the Commission at that time, according to this record.

Mr. Ransom: Objected to as immaterial and not within the issues of this case.

The Master: I will take it.

Mr. Ransom: Exception.

The order was marked Defendants' Exhibit NN.

17103

Mr. Chambers: The two questions I wanted to ask Mr. Woods, in the light of this order, were these:

First, what B. T. U. gas would his 200 pounds of bituminous coal make, and the same as to water gas, what B. T. U.'s his hypothetical situation there would make.

Mr. Ransom: Objected to.

The Master: I will let my ruling stand. The application to call the witness and ask those questions is denied.

17104 George E. Woods, Cross.

Mr. Chambers: Exception.

Mr. Ransom: On the matter of the cost of coal gas, I want to call attention to the fact that the 1918 figure on the cost of such coal gas as was made at 14th Street in 1918 was not even sixteen or twenty-six; it was 3.62 plus.

The Master: Dollars?

Mr. Ransom: Dollars per thousand.

The Master: $3.62 plus?

Mr. Ransom: Yes. And the cubic feet of gas made was 18,672,000. The figure in 1917, when less gas was made, was naturally higher.

17105 1917 was $16.78 1/5. The quantity of gas made in that year being 2,122,000, at 14th Street, and for 1916 was $34.21 and the quantity of gas made was 1,368,000, those being the quantities of gas taken from the reports as made in those years, not reflecting the period of operation.

Mr. Hayward: You might add that in some of those cases the total annual production of those plants was less than their daily capacity.

Mr. Ransom: Your Honor directed when the witness Brundage was on the stand, at 5326, and he has identified the annual report of the Consolidated Gas Company to the Commission, the

17106 Master said: "I now give you notice that I shall require you to offer that later on." That was addressed to Mr. Ransom, and I said, "Yes, I shall offer it." I now produce the Commission's copy of the annual report of the company for the year ended December 31, 1918, which Mr. Clark has just given me, and I offer it in evidence in pursuance of your Honor's direction, and in view of the cross-examination regarding the contents, which took place at that time and has since taken place.

The Master: I think I had in mind that I would require you to offer it in order to make a ruling on it, in proper form. I do not think I said I would admit it.

Mr. Ransom: Well, you indicated in view of the argument by Mr. O'Brien—

The Master: That is my recollection of it, that Mr. O'Brien made some point of it not being here, or you did not offer it or something.

Mr. Ransom: Well, it was here.

The Master: And I said I will direct you to offer it but that did not mean I was going to ac- 17108
cept the offer. I will see just what I did say. Here is what I said, page 1773. "Judge Ransom, I won't allow it on the theory they have opened the door. If you will withhold it and have it in mind and you think you want it in at some later date, you can offer it then, and I am inclined to think I may receive it on the theory that it is a report required by law. I won't consider it at this time, because I am considering a matter which is a good deal more important." And you excepted to my ruling on page 1773. You now offer the original report produced from the files of the Public Service Commission, filed 17109
by this complainant for the year ending December 31, 1918.

Mr. Ransom: Yes, received by the Commission in the Bureau of Statistics & Accounts, March 15, 1919, examined by L. R. Gottlieb.

The Master: Have you any objection to it, Mr. Chambers?

Mr. Chambers: I have the same objection I made at page 1772 and 1773, and except.

The Master: How about you, Mr. O'Brien.

Mr. O'Brien: I object to its admissibility upon

the ground it is incompetent, irrelevant and immaterial, and on the ground that—

The Master: That will be enough.

Mr. Ransom: Well, I would like to have it set forth, your Honor.

The Master: No, that will be enough.

Mr. Clark: We have no objection.

The Master: Counsel for the Public Service Commission has no objection. I shall sustain the objections interposed by Mr. Chambers and the Corporation Counsel and allow an exception.

17111

HENRY M. BRUNDAGE, recalled.

CROSS-EXAMINATION BY MR. CHAMBERS:

Mr. Ransom: I want the record to show that the manufacturing books for both 21st Street and 99th Street plants of the Consolidated Gas Company for all of the years running back to 1905 and 1906 down to the present date have been in court during the cross-examination of Mr. Woods and have been examined by counsel for the defendant, and I call your Honor's attention to that so that the record may show that they were before the court in this connection. Mr. O'Brien, for example, calls attention to January 1, 1916, for 99th Street, and I simply call your Honor's attention to January, 1916, at 21st Street.

17112

The Master: The record will show that these records have been in court and reference has been made to them by counsel.

Mr. Chambers: Now, there is another false

statement. He says counsel for defendants has examined them. Counsel for the Attorney General has not examined them. I have opened the cover of one of them.

The Master: Well, counsel for defendants have.

Mr. Chambers: It looks as though he included counsel for the Attorney General Newton in that. I have not examined them. I would like to stick to the real genuine facts in the case and not have these wild reckless statements made. 17114

Mr. Ransom: Counsel for complainant will admit that counsel for the defendant Newton has not looked inside any of the books relative to this case.

Mr. Chambers: Well, that is not correct. I have looked inside of them, but I have not examined them.

The Master: Well, let us get along with the cross-examination.

Mr. O'Brien: I did not know we had 1906 books here, or books extending back to 1906 until yesterday afternoon near the close of Mr. Woods' cross-examination. 17115

The Master: That is your fault. I knew they were here all the time. The statement was made when they were produced that they were the books from 1906 to date.

Mr. O'Brien: However, it proves that they do not need a van to bring down the essential papers, your Honor. It proves that point if it doesn't prove anything else.

The Master: No, it doesn't prove anything at all.

CROSS-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Brundage, has your department kept the accounts of the Astoria Light, Heat and Power Company?

A. When you say my department, just what do you refer to, Counsellor?

The Master: The accounting department.

A. The accounting department of the Consolidated Gas Company does not keep the accounts of the Astoria Light, Heat & Power Company.

Q. They did not in 1906?

17117 A. No.

Q. I show you Complainant's Exhibit No. 260, and ask you to take a look at it, particularly at page 734. Now, we find Astoria Light, Heat & Power Company there, don't we?

A. You find an account in that name, yes, sir.

Q. And we find pay roll. Is that the pay roll of the Astoria Light, Heat & Power Company?

A. It is not.

Q. What pay roll is that?

A. That is the pay roll of the 21st Street station of the Consolidated Gas Company.

Q. Why is it under this Astoria Light, Heat &

17118 Power Company account?

A. Because there must have been some work performed on the pay roll for the weeks in which you are looking, which was applicable to the Astoria Light, Heat & Power Company, and therefore, it is charged to their account.

Q. Now, general suspense, what is that?

A. That is a little entry for $1.31, the details of which were found in the Journal, folio 18, for January of that year.

Q. Now, this pay roll here in February?

A. 21st Street station pay roll charges.

Q. That is, you charged some of the pay roll of the 21st Street station to the Astoria Company?

A. Yes, sir.

Q. What work were those men—do you know what work they were doing?

A. I do not.

Q. At 21st Street?

A. No, sir.

Q. For the Astoria Company?

A. No, sir.

Q. They must have been doing something?

A. Undoubtedly. 17120

Q. And on both of those days?

A. Yes, sir.

Q. Now, that seems to run on here in March and April?

A. It does.

Q. Now, it seems to relate mostly to the 21st Street station, doesn't it? Now, we find here pay roll—

A. The bulk of the charges seem to be from the 21st Street station pay roll.

Q. In other words, the Consolidated Gas Company's men were doing work for the Astoria Company, some kind of work?

A. They were. And I also call your attention to 17121 the fact that when we come to November of that year, we were getting charges from other stations, from 14th Street, from Avenue A shop.

Q. That is your pay roll?

A. Pay rolls of those different departments performing work for the Astoria Company.

Q. Has that continued, that practice of having your men at these different stations render services to the Astoria Light, Heat & Power Company?

A. Why, if any of the men at any station did work for the Astoria Light, Heat & Power Company, that would be charged to their account.

17122 Henry M Brundage, Cross.

Q. Well, is that true—did you have those charges —have you had them continuously from 1906 down to the present time?

A. Oh, yes, they are going on more or less.

Q. Some of them?

A. I should say not as many as that item, Counsellor, because in 1906 the Astoria plant was just being built, and after the plant began to operate, Astoria had its own organization and gradually built up, and those charges undoubtedly decreased.

Q. So in no year from 1906 down to date did you
17123 keep the accounts of the Astoria Light, Heat & Power Company in your department?

A. The Astoria Light, Heat & Power Company has its own accounts and its own accounting department.

Q. Where is that; is it mixed in with this?

A. No, sir, a separate department, 130 East 15th Street.

Q. How about the New York Edison Company, does your department keep the accounts or any of the accounts of that company?

A. Certainly not.

Q. They have their own?

17124 A. They have their own department.

Q. How about the Standard, does your department keep the accounts?

A. The same condition. The books here are the books of account of the Consolidated Gas Company.

Q. I did not ask you that.

The Master: Do you keep the books of the Standard?

The Witness: Certainly not.

Q. No one in your department?

A. No, sir.

Q. How about the New York Mutual?

A. Same condition.

Q. How about the New Amsterdam?

A. Same condition.

Q. How about the Central Union?

A. The same condition.

Q. How about the Northern Union?

A. Same condition.

Q. None of the accounts are kept in your department?

A. None whatever.

Q. How about the National Coal & Coke Company?

A. Same condition.

17126

Q. You keep none of their accounts?

A. None whatever.

Q. Where do they have their accounting department?

A. The National Coal & Coke Company?

Q. Yes.

A. 130 East 15th Street.

Q. In your building?

A. In our building, yes. They have an office.

Q. They have a separate floor or separate offices?

A. Yes, sir, they do.

Q. Now, do you advise any of these companies I have mentioned in regard to their accounts?

17127

A. Advise them?

Q. Yes, or act in any capacity as advisor?

A. No, sir.

Q. You are certain about that.

A. The only connection I have with the other companies, Counsellor, is something like this: If a letter, as frequently happens, comes from the State Tax Department or the Public Service Commission asking some question of my own company, an answer will be prepared and sent on, and it is quite common at some later time a similar letter would be received

by one of the other companies, and they would call me on the 'phone and ask me how we answered that same question, and in which case I would very gladly show them my answer.

Q. Who checks up the accounts of the Standard, so far as make of gas is concerned, somebody in your department?

A. No, sir; their own people. I have nothing to do with it whatever, and none of my people.

Q. A statement of what gas is made is sent in to your department?

17129 A. No, sir.

Q. You have nothing to do with the amount of gas made or sold by them?

A. No, sir.

Q. Or the unaccounted for gas?

A. No, sir.

Q. Nor with any of the other companies?

A. None whatever.

Q. Where do you get your information you put in the book here in regard to that? Do you make a copy of the accounts in regard to the allied companies, so far as make and so forth is concerned?

A. Of gas?

17130 Q. Yes.

A. I would get a bill, for example, from the other companies who furnished gas to us. That comes to me through the secretary's office.

Q. And you make no examination of the records and books in regard to that?

A. No, sir.

Q. Of any kind?

A. No, sir.

Q. You just take the bill?

A. And it is credited to the company who furnished the gas and charged to the proper account in our records.

Q. So you have no way of knowing whether it is correct or not, because you simply take their statement?

A. Not from the records in my department, no, sir.

Q. Well, your department does not check it up?

A. No. As I testified, that is done by the secretary's office.

Q. I show you Exhibit 271, page 157. There is an account there, 21st Street station, and I find Astoria Light, Heat & Power Company. What is that for? Coke that you bought or sold? 17132

A. That is a bill from the Astoria Light, Heat & Power Company for coke delivered to the 21st station of the Consolidated Gas Company.

Q. That is what is meant by that, that the Astoria Light, Heat & Power Company sold or delivered some coke to the 21st Street station?

A. Yes, sir.

Q. The amount that was paid for it would be shown by that voucher No. 1574?

A. Yes, sir.

Q. You haven't that voucher here, have you?

A. I have not.

Q. Have you any way of telling from this record what the basis of the charge was for the coke, how much per pound or ton or what? 17133

A. Not from this record. The original invoice would show that in full detail.

Q. Did you check at all in any way from the records of the Astoria Light, Heat & Power Company the amount of coke so delivered as shown by that voucher?

A. No, sir.

Q. Where did you get your information from?

A. The Astoria Company would render a bill for

17134 Henry M. Brundage, Cross.

a certain amount of coke at a price per ton or per chaldron, and a receipt voucher would be received by the accounting department showing the receipt of that amount of coke, which would form the basis upon which to base that bill.

Q. What do you mean by "pay roll" on page 157 of this same exhibit?

A. That is pay roll labor in connection with handling coal from the 21st Street station coke bins.

Q. You mean the coke received from the Astoria Heat, Light & Power Company?

17135 A. I should believe so, but I could not testify without looking at the entry.

Q. I see some more running down, the same thing?

A. Some minor items of labor, undoubtedly in connection with that coke.

Q. Now, I see coal here. Is that coal purchased from the Astoria Heat, Light & Power Company, on the same page?

A. No, sir. That was the journal entry charging the coke account and crediting the coal account.

Q. Why is that coal under the coke there? I don't see the point?

A. In the absence of the journal for that year
17136 I am unable to tell you definitely what that item represents, but from the fact that in the very next entry there is a credit in the same amount I am led to believe that by some erroneous classification it was charged there and then credited by the next entry.

Q. The journal as I understand it is not in evidence for that year?

A. I think not.

Q. So that without the journal you cannot tell what that was?

A. Not very well.

Q. How do you check up on the prices of coke

paid to the Astoria Company for this as shown by page 157, for instance?

A. That price was established by the officers of the company.

Q. You had no way of determining what that was except—

A. Except that I got authority from the officers to approve bills at a certain price.

Q. What kind of information came to you from the officers of the company?

A. In the shape of a memorandum from one of the vice presidents.

17138

Q. What officers fixed the price of that coke?

A. I could not say what officer fixed it, but I can say that the authority for me came from the secretary's office.

Q. Mr. Carter's office?

A. Yes, sir.

Q. Signed by Mr. Carter?

A. Yes, sir.

Q. And stating that you were to pay so much?

A. A certain price, as agreed upon.

Q. For coke furnished by the Astoria Company?

A. Yes, sir.

17139

Q. Now, that has been uniform, hasn't it, throughout the career of the Consolidated Gas Company since 1906 that you purchased coke from the Astoria Company?

A. Yes, Astoria has sold the Consolidated coke right along with quite some regularity.

Q. Did you buy from the Astoria this coke direct or did you buy it through the National Coal & Coke Company?

A. Bought it from Astoria direct.

Q. Direct?

A. Yes, sir.

Q. And this relates to coke purchased for the 21st Street station I assume, and we will probably find coke in here—yes, turning over the page we find the 99th Street station shown on page 161?

A. Yes, sir.

Q. And these stations seem to have been buying coke here at 99th Street station, page 161 of this exhibit? You seem to have purchased coke from both the Astoria Company and the National Coal & Coke Company. Where did they get their coke from, the National Coke & Coal Company, unless they got it

17141 from the Consolidated Gas Company?

A. I find no evidence there that they bought any from the National Coal & Coke Company.

Q. The charge relates to cartage, does it?

A. I find a bill from the National Coal & Coke Company for cartage, $15.77.

Q. Did you buy at sometime or other coke from the National Coal & Coke Company?

A. I do not recall that the Consolidated ever bought any coke from the National Coal & Coke Company.

Q. The records would so show?

A. They would. They have always bought their coke from the Astoria Company.

17142 Q. Is that true of all the years that you got a price for coke from Mr. Carter, that you were to pay the Astoria Company?

A. I believe it was.

Q. Now, you were selling coke, were you not, also?

A. Which company?

Q. The Consolidated was selling coke to other people.

A. I do not recall, Counsellor, of the Consolidated selling coke. There was only one time during that awful cold snap, I remember for a few weeks, in order to help out the poor people on the east side where we

were selling coke in small quantities down at the 14th Street station. With that exception I do not recall that the Consolidated ever sold coke.

Q. You purchased coke from other companies, didn't you, besides the Astoria Company?

A. No. We made an arrangement to buy some coke, as I recall it, from that Seaboard concern within a year or so, but otherwise I do not recall buying coke from anybody else.

Q. Never brought from any company except the Astoria?

A. Not that I recall at the moment. 17144

Q. You mean you don't recall that you ever bought a ton of coke from any other company except the Astoria?

A. I do not recall such a case, Counsellor.

Q. From 1906 down to date?

A. I do not recall it. The record will show it right in the ledger.

Q. What account would it be under?

A. Coke account.

Q. You just take a look here at page 158 of this Exhibit 271, where it says, "The Seaboard By-Products Coke Company." What is that, a purchase?

A. That is the invoice from that concern, the Seaboard Company, Voucher No. 17669, and that indicates that all that coke was delivered at the 21st Street station. 17145

Q. From that company?

A. From that company.

Q. So that is an occasion when you did buy coke from another company?

A. Yes, sir.

Q. Who determined the price of that?

A. That coke was brought under the contract.

Q. Who made the price; did you have anything to do with that?

17146 Henry M. Brundage, Cross.

A. Nothing whatever. It is a matter of the contract being approved by the executive committee of the company.

Q. Made by this company with the Seaboard Company?

A. Yes, sir.

Q. If you sold any coke in 1917 it would be under the coke account?

A. It would.

Q. Are there any sales indicated there—here in black ink, would it (indicating in book)—

17147 A. It would be a credit to sundry debtors at the invoice cost. No sales.

Q. That is only the 21st Street station; we have some more here?

A. No sales.

The Master: Do you know of any sales, Mr. Chambers?

Mr. Chambers: Do I? No, not this year.

The Master: Then do not let us waste a lot of time having the witness look for something that is not there.

Q. Any there?

A. I do not find it.

17148 Q. Any at the 14th Street station?

A. I do not find any.

Mr. Ransom: Not even in 1918.

The Witness: Just to correct the record, I find in these two stations here, these items, this credit to sundry debtors journal 96, a credit at the 14th Street station of $810.42, and at the 42nd Street station, Journal 96, $380.73. That indicates that during that month of January there were sales of these small amounts to various people credited to the coke pile.

Q. Who made the prices for that coke sold?

A. I should say undoubtedly one of the executive officers of the company. Which one of them I am unable to say. It must be an extraneous item, Counsellor. It appears during that one month, during the cold spell.

Q. Are you able to say what the price was of the coke you sold?

A. From the underlying data; yes, sir. I am not able to from that journal, but from the sundry debtors' ledger I could tell you the quantity and the price.

Q. Did you have anything to do with the fixing of the price of any coke that was sold? 17150

A. No, sir.

Q. In any year, did you?

A. No, sir.

Q. Where coke was obtained at one station and used in another what charge did you make for the price of that, as between the different stations?

A. You are referring now to where a coal gas station of the Consolidated made coke?

Q. Say if you had coke at the 42nd Street station, and you used it in the 21st Street station, what credit did you place on the books?

A. It would be credited to the station that produced it. 17151

Q. It would be credited to 42nd Street?

A. Yes, sir.

Q. How much?

A. You mean as to the rate? The rate established by the executive officers of the company, in consultation with engineer Woods.

Q. You had nothing to do with that?

A. Nothing to do with fixing the price. We charge the stock pile with the station that got the coke and we credit the station that produced it.

Q. You do both?

17152 Henry M. Brundage, Cross.

A. It has to be credited and debited in the same amount.

The Master: But you add cartage to it?

The Witness: The question of cartage would likewise be charged to the cost at the stock pile

Q. Do you know what those amounts were for the different years—the price at which it was debited and credited?

A. No, sir; they are likewise a matter of record, Counsellor.

Q. I know, but is it in this book?

17153 A. As to the prices?

Q. Yes.

A. No, sir.

Q. Where would you find that?

A. In the supporting data for the journal entry, whereby one station was credited and the other charged.

Q. Would the supporting journal entry or vouchers be shown here in these operating ledgers?

A. This ledger that you have before you will refer to the journal entry, giving the number or page on that journal entry you can trace back to the original ticket showing the delivery of so many tons or cal-

17154 drons of coke from one station to another.

Q. Would it show the price?

A. And the price would also appear in that entry, I believe.

Q. The same method for the entire period from 1906 down to date?

A. Yes, that same routine has always been followed.

The Master: This is not really cross-examination, Mr. Chambers. This is really a fishing excursion, asking the witness to tell you where you are going to find things. It is not cross-examination, and I am inclined to think I will shut it off.

Mr. Chambers: These books are all in evidence.

The Master: I know they are, but instead of bringing out by a question anything from this witness which would limit or contradict his testimony, or make it less valuable, your questions are all directed to inquiries as to where your experts will find something. I am not going to permit that line of cross-examination any more. We have had too much of it.

Mr. Chambers: That is the only kind of cross-examination I have, to find out how these entries 17156
are made in the books, and what supports them.

The Master: That is not cross-examination.

Mr. Chambers: Find how we will check them up.

Mr. Ransom: The way these coke prices were determined has all been testified to.

The Master: It is just as easy for your experts to ask Mr. Brundage in his office where you can find those things, as to ask him on the stand.

Mr. Chambers: We have him under oath, and these books are all in evidence.

The Master: You said that a few minutes ago. Don't you think I know they are in evidence?

Mr. Chambers: We are entitled to examine 17157
somebody about these entries.

The Master: You are not entitled to waste hours asking questions that are perfectly apparent from the books themselves.

Q. Will you turn to page 662 of that ledger. You run an account known as Repairs to Mains, do you not?

A. We do.

Q. Where do you get your information from for these entries in here? Take 1906, Exhibit 260. Can you tell me?

17158 Henry M. Brundage, Cross.

A. Yes. The charges in the account of Repairs to Mains, come to us from the pay rolls representing labor, from sundry creditors' bills representing materials furnished for that kind of work, from cartage tickets for work performed by the Transportation Department in connection with that work, and occasionally small items of incidental expenses come to us from the petty expense tickets.

Q. In that I see are included charges for materials purchased. Where do you get that information from—say, like pipe?

17159 A. From sundry creditors' bills. I just told you the routine.

Q. That is the only information you have for the entries here in repairs to mains?

A. Let us be specific, Counsellor. Take the item Hastings Pavement Company, this represents the bill dated January 8th, rendered by the Hastings Pavement Company, Voucher No. 44, $22.79. The bill is in evidence in our files, has been exhibited to your examination, and attached to the bill is full supporting data showing what the charge consisted of, who vouched for it and its approval, the executive committee's approval to pay the bill.

17160 Mr. O'Brien: I move to have the last sentence of the answer stricken out as not responsive and as giving us a conclusion. The witness says that books were produced showing this and that and the other thing. What they show is a conclusion of law and for that reason this voluntary statement I object to.

The Master: The motion is denied.

Mr. O'Brien: Exception.

Q. The pay roll item here on page 517, where do you get that from?

A. From the original pay roll itself, sir.

Q. Sent down by the Hester Street station—or the 21st Street station?

A. This particular item to which you refer represents labor on the 21st Street station pay roll applicable to repairs to mains in the Hester Street district, with a charge of $4.

Q. What do you have before you when you make that entry?

A. The original pay roll.

Q. Sent down by the superintendent of that station?

A. Yes, sir.

Q. Over his signature?

17162

A. Approved by him.

Q. And that is all you have?

A. And of course that pay roll has gone through the necessary checks and verifications as to its accuracy, and the auditor's approval. When that is done we post it.

Q. You keep the accounts you have in your department of all appliances sold, do you not?

A. Yes, we keep a record.

Q. Including gas stoves loaned, etc.?

A. Yes, we have an account for that.

Q. Where do you get your information for that—from that source?

17163

A. From monthly reports turned in by the five commercial departments showing the appliances received and those sent out on rental, and those sold.

The Master: Do you not think that was pretty well covered before those books got in evidence?

Mr. Chambers: No, we did not touch on these particular items.

The Master: I am not so sure about it. I allowed a pretty full cross-examination preliminary to permitting these books in evidence, and I am not disposed to take much more of it.

Mr. Chambers: Your Honor, I want to spend a good deal of time going over these different items to see how he made this up.

The Master: You ask questions and I will rule on them.

Q. Do you know how much of the time your force is spent in taking care of the accounts for the appliances sold and loaned?

A. No, I do not.

Q. There is no way of apportioning that?

A. No, no, there are several clerks devote a part of
17165 their time to that work. It is all a part of the general accounting routine.

The Master: There is no way of figuring that?

The Witness: I could not determine it, your Honor.

Q. It could not be done?

A. Oh, no.

Q. There are some of them devote all their time to that?

A. No, sir; there is no one man devotes all of his time to it.

Q. In your department?

A. No, sir.

17166 Q. Just some employees?

A. Just some employees devote part of their time in rounding up the reports and at the end of the month preparing the necessary journal entries.

Q. Some of the men in your department devote some of their time to the income of the Consolidated Gas Company, do they?

A. The income?

Q. Yes, income from stocks and bonds of other companies?

A. No, sir, not one of them.

Q. Do you not carry any such account in your department?

A. We keep an account in that ledger before you of all investments that the company has.

By the Master:

Q. Some of your men attend to making those entries, do they not?

A. Yes, as part of the routine. But, your Honor, it is so infinitesimal you cannot measure it.

Q. I know that, but Mr. Chambers is trying to point out and put on the record the proposition that your Accounting Department does not devote all of its time exclusively to what he says is the gas making part of your business. That is his point. His contention is 17168
that the appliance business is not part of the gas making business and the keeping of your accounts for investments is not a part of it; and he wants to put it on the record that your men do some work with regard to those things. That is correct, is it not?

A. My answer to that is that the time of the accounting people who do those things is so infinitesimal I could not measure it.

Q. But they do something?

A. They have to make a posting.

By Mr. Chambers:

Q. They have to do more than that, do they not?

A. No, sir.

17169

Q. Is that all they do in your department?

A. In respect to investments and loans of the company, all they get is one item on the weekly audit, and there it stands.

Q. Who makes up the account "Dividends Uncalled For" and carries that along?

A. The treasurer's department.

Q. You have nothing to do with that?

A. No, sir, they send me a record every month.

Q. It is in your operating ledger?

A. It is.

17170 Henry M. Brundage, Cross.

Q. Somebody has to take care of that?

A. Yes, sir.

Q. That takes time?

A. It does. It takes about a minute and a half once a month for a clerk to write an entry.

Q. Then you have to take care of the account for Dividends Paid?

A. Yes, sir.

Q. That takes time?

A. That comes from the treasurer's department, and once every three months the clerk makes one
17171 entry that takes about half a minute, that is charged to dividends, and there it stands for the rest of the year.

Q. And that is all it takes to run those accounts, half a minute?

A. That is all.

Q. Now, loans, I see you carry an account here for a good many loans made to your allied companies and other people.

The Master: That question has in mind the same thing?

Mr. Chambers: Yes.

The Master: Objection sustained. I think the
17172 point that sometime is used for appliances and for loans and for discounts and matters of that kind is sufficiently spread upon the record.

Mr. Ransom: You will not take up Mr. Teele, will you?

The Master: I can't say. I can't for the life of me see what cross-examination there is of Mr. Brundage, beyond what was had before I let the books go in.

Q. Now, interest, you carry an item for interest?

The Master: I assume that that question has relation to the same point, and I will make the same ruling.

Mr. Chambers: Well, I don't know; I want to find out.

The Master: If you don't know what point you have in asking that question about interest, I think I will sustain the objection anyhow.

Mr. Chambers: I don't know what his entry here is.

Q. What is this entry here on page 611 that relates to interest?

The Master: Mr. Chambers, haven't you and your experts availed yourselves of the time since these books were put in, to familiarize yourselves 17174
with the books? That was the purpose of postponing this cross-examination.

Mr. Chambers: They are working on it, all of them.

The Master: I will sustain the objection.

Mr. Chambers: Exception.

Q. Now, repairs to buildings. You carry an account, or you did, for that?

A. We did, yes.

Q. That is taken care of in your office?

A. Yes.

Q. That includes repairs to the office building?

A. What year are you looking at, Counsellor?

Q. 1906. 17175

A. 1906?

Q. Yes.

A. We carried an account for Repairs to Buildings and all of the various plants of the company.

Q. Does that include any of the buildings of the allied companies?

Mr. Ransom: Objected to.

The Master: Objection sustained. My ruling will be, Mr. Chambers, so you may know how my mind operates, that as these books have been

subject to inspection by the accountancy expert of the defendants for a period of some four or five or six weeks or more—

Mr. Ransom: Months.

The Master: And the cross-examination of Mr. Brundage was postponed in order to give your experts a chance to analyze these books and get all the information they wanted, that I am not going to permit any further questions asking what is this, what is that and what is the other account, and what does this mean, and what
17177 does that comprehend. Your experts should have found out all about it. Change your cross-examination to relate to some particular point you want to point out and show us the time of this department to the extent of a half minute or a minute in some cases was used for what you say is not proper in the gas business, but I will not permit any more questions along the line you are pursuing. Any questions you have touching the accuracy of these books, the witness's ability to say that they are accurately kept, and anything of that sort, I will allow, although I think it is pretty fully covered, when I think of it.

17178 Mr. Chambers: Of course, if your Honor won't allow me to go into these various items, I cannot test it, but I want to go into them fully, and see where he gets his basis for the entries.

The Master: My ruling is that you and your experts ought to know where he gets his basis, and before these books were put in evidence he was fully cross-examined as to where the entries came from, and where the supporting data was to be found. I won't allow any further questions.

Mr. Chambers: Then I will have to sit down.

The Master: And I will be glad to see you sit down.

Mr. Chambers: If you won't allow a question of any kind.

The Master: No, of the kind you have been asking, I won't.

Q. Now, I see an entry here "Real Estate Rents Paid," on page 645, and among others here is the Standard Gas Light Company. What are those? What is that amount?

Mr. Ransom: Objected to.

The Master: Objection sustained. The witness will simply be able to say what he said before, "I have got to look at the journal and the 17180
vouchers, and I cannot tell without referring to them," and I am not going to permit any more time to be wasted.

Q. Well, your force in your office carries this account, Real Estate Rents?

Mr. Ransom: Objected to.

The Master: Objection sustained. The force in his office, as I understand Mr. Brundage, carry all these accounts.

The Witness: They do.

The Master: Make all the entries?

The Witness: Every entry in that book kept in my department.

17181

Q. Well, can you say what time was spent by yourself and others in your office on accounts like "Real Estate Rents"—

The Master: Investments, loans, interest and other items of that character?

The Witness: I cannot.

The Master: Finance business?

A. I cannot.

The Master: Next question.

Q. Now, you carry an account here for 1906, on page 733, entitled "Renewals and Contingencies."

A. We did.

Q. Did you carry that right along now for every year since 1906?

A. We did not. We carry an account now under the title of Renewals and Replacements.

Q. Now, you have a subhead here, Depreciation, which is just a little amount of $200,000. Where did you get that from, on page 733 of this same operating ledger for 1906?

A. That entry represents the original cost of property withdrawn from service during that year.

Q. Under the head of depreciation?

17183 A. No, not under the heading of depreciation, but it is charged.

Q. Now, this item of depreciation, Voucher 251?

A. That is an amount which is charged against the reserve and represents the original cost of property withdrawn from service during that year.

Q. Where did you get that from?

A. You will find that entry refers back to the journal entry, and the journal entry in turn is supported by data showing how each of the various items are made up: withdrawal of items from plant; withdrawal from street mains; items of meters; items of services, all of the different kinds of property that went out of

17184 service during the year.

Q. Who determined the actual cost of the items that were withdrawn?

A. I did.

Q. You did?

A. Yes, sir.

Q. The cost?

A. Yes, sir.

Q. How did you get at it?

A. From our books of account.

Q. Now, that is everything that was withdrawn from service during that year?

A. Yes, sir.

Q. Including mains? A. Yes, sir.

Q. And services?

A. Yes, sir.

Q. Now, take mains, for instance; how do you determine what the mains cost?

A. The street department furnish us a record of all the mains that they have abandoned and taken up each month. That amount of mains is computed by me at the cost at which they were taken into the company's accounts in the organization of the company in 1884, and a certain mileage of mains at a certain price costs so many dollars, which is pulled out of our as- 17186
sets.

Q. Referring to 1884, what did you use there as the basis?

Mr. Ransom: Just a minute.

Q. Suppose a piece of main that was taken up which was built—

The Master: I will allow this.

Mr. Ransom: It seems to me it was very fully covered when Mr. Brundage was on the stand before, and in the second place, the examination conducted exclusively as to the 1906 ledger, hasn't very much to do with the issues in the present case and at the present time.

17187

The Master: I am letting this question go in in the hope that Mr. Chambers won't find it necessary to take every book from 1906 to date.

Mr. Chambers: That is what I would like to do, take them all at once, but I can only take one at a time.

Mr. Ransom: 1906 was before the uniform system of accounts.

The Master: I know that, but let us find out how Mr. Brundage arrived at the cost of withdrawals.

17188 Henry M. Brundage, Cross.

The Witness: Well, I will cover all the years, your Honor, in one statement, if I may.

Q. No. Here is a main that was withdrawn, we will say, this year, 1906, that was laid in 1880. Now, how did you determine the cost of that?

A. At 1884, November 11th, the Consolidated Gas Company was formed, and a detailed inventory of the properties was prepared and the books of account were opened based on that inventory.

Q. And you used that?

Q. And I used that, because that is the amount
17189 which was set out in my books in 1884.

The Master: As the cost?

The Witness: As the cost to the company, sir.

The Master: And that is the basis?

The Witness: That is my basis for all subsequent withdrawals.

Mr. Ransom: So-called renewals and replacements.

Q. Who made that inventory?

A. We know it as the Rowland Appraisal, Counsellor.

Q. That did not show the actual cost?

17190 A. That was an appraisal of property at that time.

The Master: The cost to your company was the stock you issued for it?

The Witness: Yes, sir.

The Master: What it cost the other company to put it down, you don't know?

The Witness: I don't know.

The Master: All you know is what it cost the Consolidated Gas Company by capital stock issue.

The Witness: Yes, sir.

The Master: At $100 a share?

The Witness: And that is the amount I must withdraw when it goes out of service.

Q. And that was an appraisal?

A. Based on this original appraisal.

The Master: It may not have cost somebody else two cents, but if the company gave a share of stock which cost them $100, the cost to the company was $100.

The Witness: Exactly.

Q. Did you take the average figures?

The Master: Objection sustained. The witness has told us what he has taken.

Mr. Chambers: He told me he used the Rowland report as a basis. 17192

The Master: The Rowland report he has taken as setting up the cost price of these various mains to the company, or the various companies.

Mr. Chambers: That was an average figure in the Rowland report.

The Master: I don't care what it was. Don't you get my point, Mr. Chambers? I don't care how Mr. Rowland got at it, and I don't care what it cost originally, and I don't care how it was figured. If the Consolidated Company issued a $100 share of stock for an item, no matter how it was taken and how it came in, but it cost them $100 for a $100 share of stock, that is the cost 17193
to the Consolidated.

Mr. Chambers: Well, it is not the cost of those mains?

The Master: No. It cost the company that amount, though. Don't you get my point?

Mr. Chambers: It is the average cost of all mains, of different sizes.

The Master: Objection sustained.

Mr. O'Brien: Will your Honor repeat what you just said about that $100 of capital stock?

The Master: You can read the minutes tomorrow sometime when you get them.

17194 Henry M. Brundage, Cross.

Mr. O'Brien: The Consolidated—

The Master: I said you can read the minutes when you get them tomorrow sometime.

Mr. O'Brien: I want to make an objection, your Honor.

The Master: Next question.

Q. Contingent expenses here set forth. Oh, just a minute. In all your operating ledgers have you treated withdrawals of mains and services and every other piece of plant that was withdrawn in the same way?

17195 A. I have, in every year they have been charged against a reserve created for that purpose.

Q. After 1884, if a main was built subsequent to 1884, and was withdrawn, say, in 1906, how did you go to work to get the cost of it, and what did you use then?

A. We stuck to our old appraisals.

The Master: No, the new stuff that came in after that.

The Witness: That might happen, your Honor, in some minor cases, but we cannot determine when we take up a main whether it was laid—or a piece of main—whether it was laid in 1884 or 1859, or 1906, but as long as there is an

17196 asset there, sir, we have withdrawn all mains at the old price.

The Master: That is what Mr. Chambers wants to know.

Q. So regardless of whether the main or service was laid before 1884 or after, you still stuck to the appraisal made by Rowland?

A. Yes, sir.

Q. Which was an average price?

A. No, it was the actual cost to the Consolidated Gas Company, the Rowland appraisal was.

The Master: What do you mean by average price?

Mr. Chambers: So much a foot, whether laid in rock or in earth,

The Master: Well, let us get that clear. The Rowland figure was so much a foot for a six-inch main, whether two feet under ground or six feet under ground, in rock or earth?

The Witness: It was.

The Master: And he figures so much for a four-inch main whether old or new, or deep or shallow, or whatever its condition was? 17198

The Witness: Yes, and his table will indicate on which my computations are based.

Q. Couldn't you have computed the actual cost of a main laid after 1884 and withdrawn in 1905, instead of using the Rowland appraisal?

A. No.

Q. You could not?

A. No, sir.

Q. Isn't there any way of doing it?

A. No, sir.

Q. You haven't any cost whatever?

A. I would not say we haven't got any cost. But don't you see, when you lay a main we will say, for 17199 four blocks on an avenue a block and a half will be through rock and the other block will be through quicksand, and another block through dirt, part of it will be under pavement and part of it won't be under pavement, and the whole thing as a project, we know what it costs, but five years later you pull out a piece of it, and we cannot determine just what that piece cost.

Q. Down to how recently have you used the Rowland report as a basis for the mains and services withdrawn?

A. Down to September 30, 1919.

Q. You still, right down to date, are using the Rowland prices, average prices?

A. Right sir, and we are going to close our October accounts on that basis.

Q. For property taken out of service?

A. Yes, sir.

Q. Did you use the Rowland report for meters withdrawn, too?

A. Yes, sir.

Q. You used Rowland's average price right down to date?

17201 A. We used the Rowland appraisal for meters.

Q. What else did you use the Rowland appraisal for except meters, services and mains, in the same way?

A. Not in the same way, Counsellor. When you get away from items like services and mains and meters—

Q. Tell the ones you treated in the same way?

A. The items of mains and services and meters I have already described to you, but when you come to other property, like land and plant, where there are big units, we can determine definitely whether those units are in the Rowland appraisal or were subsequently acquired. If they were in the Rowland appraisal then we tear them out at the cost as shown by that appraisal; but if they were subsequently acquired then we go back to our books of account showing the acquisition, and pull it out at that price.

17202

Q. Why don't you do that as to mains and services?

Mr. Ransom: Objected to.

The Master: That has already been explained, and the objection is sustained.

Q. You can tell when a meter was bought, can't you?

A. Approximately.

17203

Q. And if a meter was purchased in 1889 and withdrawn in 1906, you use, you say, the Rowland appraisal for that?

A. I do.

Q. Yet you could determine what that meter cost in 1889?

A. I could not.

Q. You say you could not?

A. No.

Q. Why not?

A. The only knowledge we have as to an individual meter is—when the Public Service Commission went 17204
into effect on December 31st, 1908, we obtained from the meter manufacturers the serial numbers they were then using, and all meters withdrawn since that date either come before the serial number or after. They required us to divide our withdrawal of meters between fixed capital December, 1908, and fixed capital subsequent. We had to make that division, and we took those serial numbers in order to give us that division. Every meter number prior to December 31st, 1908, I don't know what year it was bought in, and no one can tell.

Q. Since 1909 you can tell what a meter actually cost that you withdrew later?

17205

A. The information could be dug out, I have no doubt.

Q. You don't do that?

A. We don't do it.

Q. Now, you pull out a main or a service or a meter or a piece of plant, you have described in that way. Now, what do you do with the scrap value of the piece of main you pull out and carry in the way you have stated?

A. The charge against the reserve consists of three factors. The charge against the reserve is the net

loss imposed on the company. There are three factors, the original cost of the property withdrawn, plus the cost of withdrawing it, labor, etc., in pulling it down, less the salvage.

The Master: So that this is the net?

The Witness: That is the net charge against the reserve for that purpose.

Q. How do you treat the salvage value of a meter so withdrawn?

A. I apply it to reduce the loss imposed upon the company by the withdrawal.

17207 Q. Where do you get the salvage value of it, how do you determine the salvage value?

A. We sell it for scrap immediately. That is the only value of an old meter, the scrap value.

Q. Everything you pull out is sold, and you credit it with the scrap value?

A. So far as meters are concerned, yes.

Q. How about pipes and mains?

A. Same condition about pipes and mains.

Q. How about holders?

A. There have been occasions, Counsellor, on mains—I will make it perfectly clear in your mind, and it happens with some other assets—where a unit

17208 of property is taken out of service that has some scrap value and some material and supply value. You can imagine taking up a main of 40 feet, and three-quarters of it is in such bad shape that it is thrown out and discarded, while 10 feet of it is good. That would go back into stock.

Q. Who determines that?

A. The local street superintendent knows whether that pipe is fit for use again or not.

Q. What does he do?

A. He reports it on a regular monthly report, that your people have examined at great length. We call

them pipe and special reports, material returned to stock.

Q. When you retire a piece of real estate, what do you take that at?

A. We do not retire real estate, we sell it or hold it.

Q. How do you treat that?

A. The same general theory would apply.

Q. Well, here is a piece of real estate, perhaps it has a holder on it, we will say, and the holder is dismantled, and you sell that piece of real estate?

A. Yes.

Q. That is what you say?

A. Yes. 17210

Q. You don't always do that, you are carrying some of it, are you not?

A. If we are carrying any of it that is not being used I think our company would be glad to sell it. I don't know that, I am not an executive officer.

Q. Where do you charge in here what you originally paid for it?

A. We get no charge in that account at all.

Q. No credit to that account for the difference between what you paid and what you sold it for?

A. No, sir.

Q. Where do you put that, that velvet?

A. That would go to the profit and loss account. 17211

Q. And used to pay dividends, is it?

A. Let me answer your question so it is perfectly clear on the record. What we do—

Q. My question is, is it used to pay dividends?

A. Why, whenever we have an item in the profit and loss account, a dividend may be paid from that account.

Q. If you make a profit on a piece of real estate like that, sell it for more than you paid for it, you put that in the account that goes to pay dividends?

A. We credit that to our profit and loss account.

By the Master:

Q. What I want to know is this: When you sell a piece of land don't you have to withdraw it from the capital account?

A. Yes, I started to explain that when he interrupted me

Q. At what figure do you withdraw it from capital account?

A. We know from either the Rowland appraisal, or if it was acquired subsequently, the actual cost of that piece of land—

17213 Q. Either one is the actual cost to you?

A. Yes. Now, we sell that for something more than the actual cost. The purchase price that we receive, to the extent that it is set up in our books, becomes a credit to our capital account, thereby extinguishing the capital account. The balance goes to profit and loss.

Q. And if there is a loss in the sale of real estate it is charged—

A. Charged to profit and loss.

By Mr. Chambers:

Q. The loss is charged? Assume you sell a piece of real estate, any real estate at a loss, say of $10,000?

17214 A. We would charge it to the profit and loss account.

Q. Since 1906 have you done that? Have you pursued that policy since 1906?

A. Yes, sir.

Q. Right down through?

A. Yes.

The Master: Where do you think it goes, Mr. Chambers?

Mr. Chambers: I think it is charged to the gas consumers when they lose, that is what I think.

The Witness: Your Honor, the reserve that he is referring to there set up to cover losses on

property retired was never intended to cover a loss or a gain resulting from the sale or disposition of real estate, but for the plant.

Q. How do you know it was never intended?

A. Because I think that would be a very unfair thing to do.

The Master: Mr. Brundage testified at the outset that he was in a lot of these conferences and seemed to think he knew what these things were intended for.

The Witness: It seems to me we might say, your Honor, that the Public Service Commission never intended that such a thing was to be done by their accounting system. 17216

Mr. O'Brien: I move to strike out the volunteer statement of the witness as to what the Public Service Commission intended to do. This is reducing this testimony to an informal hearing, a symposium where Brundage is doing all the talking.

The Master: I thought we were going to get a *reductio ad absurdum*.

Mr. O'Brien: No, but trying to tell us what that commission intended to do at any time is getting away into a land of dreams and imagination, under the counselship of Ransom, what they intended to do. 17217

Mr. Ransom: Under the commissionership of Maltbie, that is when these things were done.

Mr. O'Brien: I represent Edward Swann, and not Maltbie, or anybody else attached to that commission today or in the dead past.

The Master: Motion denied.

Q. Mr. Brundage, take a piece of real estate with a building on it, say a building used in making gas, and you retire that and sell the land, and there is a loss, what do you do, that is, a loss on the building?

A. A loss on the building—

Q. Not a loss on the land, but a loss on the building on the land?

A. The loss on the building or its contents is charged against the reserves.

The Master: How can you tell what you get for a building and how much you get for the land if you sell a piece of real estate, land and buildings together?

The Witness: If such a case arose—I do not recall such a case arising—but if it did arise I
17219 would ask the people who negotiated the sale to split the purchase price for which the property was sold, between the land and buildings. It is not the practice to sell it that way. Such cases as we have had, the arrangement has been to sell the land clear, and we would enter into an agreement with a wrecking concern to take down a holder or whatever building was to be removed.

Q. Where do you credit the profit on land, where you had a loss on the building?

A. I have already told you. All credit from land transactions go to profit and loss. Losses on plant go to the reserve.

17220 Q. You mean by that reserve, going to depreciation?

A. No, I don't mean any such thing.

Q. Going to renewals and contingencies?

A. Charged against the reserve created for that purpose.

Q. And your renewals and contingencies are taken out of the income from sale of gas to consumers?

A. That reserve was set up in that year by a charge to operating expenses.

Q. I say, it comes out of the company's operating income?

The Master: That is the item that is either three or three and a half cents?

Mr. Ransom: It has been three and a half over the period.

Q. The renewals and contingencies are those set up as three and a half or three cents a thousand?

A. No, my recollection is in 1906 that reserve was set up ten cents a thousand.

Q. And has it varied in different years? What was it in 1919?

A. Three cents a thousand.

Q. And 1918? 17222

A. Three cents a thousand.

Q. And 1918?

A. Three cents a thousand.

Q. And 1917?

A. Three cents a thousand.

Q. And 1916?

A. Three cents.

Mr. Ransom: Just a moment. Are you speaking of renewal or renewals and contingencies?

The Master: I thought renewals and replacements were renewals and contingencies. Are there two accounts since 1908?

The Witness: Up to 1914, inclusive, we set 17223 up a reserve at ten cents per thousand for renewals and contingencies. Beginning January, 1915, there was a change. My recollection is that the reserve thereafter was split in two, there being a reserve for renewals and replacements at three cents a thousand, and for contingencies at five cents a thousand, and the three cents a thousand has been continued until this day.

The Master: And how about the five cents?

The Witness: The five cents per thousand was set up, not by a charge on operating expenses, but by a charge against income at the

17224 Henry M. Brundage, Cross.

end of the year, for the years 1915, 1916 and 1917. No reserve was set up in 1918, nor so far in 1919.

The Master: Why not in 1918.

The Witness: That is an executive question that I cannot answer. All these matters were done by direction of the executive committee of the Board of Directors.

Mr. Ransom: The contingency reserve was not a charge on operating expenses?

The Master: So he just said.

17225 Q. How did you start this account? Were you there when this account was started, renewals and contingencies?

A. I was.

Q. What year was it started in?

A. In 1904, from memory.

Q. How did you start it?

A. Why, it was started as I just testified at ten cents per thousand cubic feet of sales.

Q. You open it up on that basis?

A. Yes, sir.

Q. In other words you set aside so much a month?

A. Right. Entries are made each month.

17226 Q. Out of operating expenses?.

A. Yes, sir, ten cents per thousand if set up and entries made each month.

you commenced to build up this fund?

Q. You mean you started at zero on that in 1904,

A. That is my recollection.

Q. Out of operating expenses?

A. That is my recollection.

Q. And it has been accumulating like a snowball ever since?

A. No, sir, it has not.

Q. You mean you debited it from time to time.

I see no debits on page 733—oh, yes, excuse me. Your debits here do not amount to as much as your credits in this particular instance, do they?

A. They may not.

Q. That has happened pretty often, has it not?

A. I remember several times when it was the reverse.

Q. That is to say, your renewal and contingent fund grew at that rate of ten cents faster than your debits against it?

A. Up to the time that the account was closed and it was transferred to contingency on or about January 1, 1915. 17228 Subsequently to that date we made no credits to reserve out of operating expenses.

Q. Then ten per cent, or ten cents, was too much and the fund accumulated faster than the charges against it?

A. That is not for me to say.

Q. What do you do, Mr. Brundage, in cases where the mains are not used—that is, mains that have been used, but are not now used, and still remain in the street? I mean where the main is not taken out. You have cases like that, lots of them?

A. We do.

Q. What do you do then? 17229

A. We have cases of mains where one of two things has happened to them. They are either temporarily disused, or they are abandoned for all time. The General Superintendent of the Street Department is the authority as to which category they go under, and he sends a monthly report to the accounting department of mains abandoned, which become items to be written off and are written off at the end of each month. If they are temporarily disused, we continue to carry them on the accounting records as mains temporarily disused, until the reports they have been reconnected or finally abandoned.

The Master: I suppose that where these mains

are abandoned you simply write off the cost without allowing for any salaries, because it would not pay you to take that out?

The Witness: Right, sir. If they are abandoned, that is just what happens.

Q. Who in the complainant company determines as to other classes of property, whether it shall be treated as withdrawn from the service or not? You have now spoken of mains and services and told me who does that. Who decides as to the other pieces of property, whether they shall be withdrawn or not,
17231 or abandoned, or what shall happen to them?

A. Why, that is purely an engineering question.

Q. Who does it—Bradley?

A. No, that work is handled through the engineer of construction.

Q. Whose department is that?

A. Mr. William Cullen Morris, engineer of construction. His department looks after the matter of withdrawing property for any reason whatever.

Q. That is, say, the 42nd Street holder. He would determine whether he would abandon that or not, would he? He would be the man?

A. Whether he would abandon it after consulting
17232 with engineer Woods or with the chief, I do not know.

Q. But it would get to you from him?

A. It would get to me from Engineer Morris, that such a thing had happened, and how it happened and when it happened.

By the Master:

Q. Would it come through Morris, or would it come through the executive committee?

A. He would get authority from the executive committee first, your Honor.

Q. What I mean is, Mr. Morris would not abandon a plant or piece of property without getting the approval of the executive committee?

A. Certainly not, sir.

Q. So in the last analysis, it all comes through the executive committee?

A. It does, sir.

By Mr. Chambers:

Q. You get the details from Mr. Morris, though?

A. I get the details from Morris as to what he has done—his department has taken down a holder, and identifies it.

Q. Assume that Morris reports to you that he withdraws the 42nd Street holder; who puts the dollars on that? 17234

A. I do.

Q. You determine how much it shall be withdrawn at?

A. Absolutely.

Q. Where do you get that?

A. I have already testified where I get it from. I go back to Rowland's appraisal, or a subsequent acquisition, and determine the actual cost which is carried on our books.

Q. You take the net. You allow or credit that withdrawal, do you, if it is a holder, and determine how much shall be allowed for it, and do you figure the scrap value of your holder, say, if it is a holder? 17235

A. I do not figure the scrap value? That is a matter of known record.

Q. Say it is a holder; how do you compute in that case the scrap value?

A. It is the amount of cash that I recover from somebody for the sale of the old holder. It is actual cash. There is no computation about it.

The Master: It is not estimated.

Q. Who is that sold through?

A. The construction department would sell it.

Q. Then they report to you how much they got for the holder?

A. Yes, sir. Then it is up to me to get the money.

The Master: And you credit it to the proper account?

The Witness: I credit it to the proper account, sir.

Q. To make a long story short, these answers that you have given me, while they relate apparently to 1906, are true of ll the time from 1906 down to date, are they?

A. Yes, Counsellor. The same procedure has gone on all the years I have been with the company.

17237 Q. Take a case where a main is abandoned in a street, or removed, and you put down in that street a new main, either smaller or larger—generally larger—what do you do in that case?

Q. Ho w long had your mother had the boat? A. one.

Q. Whether it is the same size or not?

A. Yes.

Q. You capitalize a new one and you withdraw an old one?

A. We withdraw the old main and capitalize the new main.

The Master: Capitalize the new one at what

17238 price?

The Witness: Actual cost.

Q. And that has been the practice from 1906 down to date?

A. Ever since I have been with the company.

Q. Well, for a long time?

A. Yes.

Q. We can say it has been the practice from the time you went with the company down to date?

A. Yes, sir.

Q. In the case of meters withdrawn, say a meter is withdrawn and a new one put in its place, what do you do then?

A. Meters are withdrawn but new ones not put in their place. Meters are bought in large quantities and condemned in large quantities. Meters that are condemned and disposed of become a credit to our capital account at the original Rowland appraisal. The new meters bought from manufacturers and put in stock are capitalized at their actual cost.

Q. You did not quite get our point. Take Mr. Smith, you remove a meter from his premises—one of your consumers.

A. Yes.

Q. And you put a new meter in its place for the 17240
one removed.

A. Yes, sir.

Q. What entries do you make?

A. None whatever in our books of account. That kind of a transaction is going on every day in the year, Counsellor, and it simply results in a statistical record in the branch office. You have not changed your capital investment one bit.

The Master: It may be over in the repair house for a time.

The Witness: Yes.

The Master: And then go back into service again?

The Witness: Right. 17241

Q. As to services, what do you do when you pull a service out and abandon it?

A. The same procedure as in respect of mains. Services that are abandoned are written off on the Rowland appraisal, 1884.

Q. You say the same procedure as mains?

A. The same procedure as mains.

Adjourned to Wednesday, November 5, 1919, at two o'clock P. M.

Last Complainant's Exhibit 361.
Last Defendants' Exhibit NN.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 17245

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, November 5, 1919.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant,
MR. CHAMBERS, of Counsel for defendant NEWTON.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 17246
MR. O'BRIEN, of Counsel for defendant Swann.

HENRY M. BRUNDAGE resumed the stand.

CROSS-EXAMINATION CONTINUED BY MR. CHAMBERS:

Q. Mr. Brundage, you intended to testify last week, as we understood you, that all property withdrawn or retired or ceased to be used, is reported to you by the engineering department, and that you determine the amount which represents that property, 17247 after which a credit should be made to the fixed capital account?

A. I did not.

Q. You did not?

A. I did not.

Q. Wherein is that erroneous?

A. You have a phrase there, you have just used, "property not used," or "property disused," or some such term as that. I did not intend to cover any such point, and did not cover it.

17248 Henry M. Prindage, Cross.

Q. I don't find that in my question.

A. Read your question again.

Q. All property withdrawn or retired, or that ceased to be used—is that the phrase you object to?

A. That is the phrase I object to, sir.

Q. Well, then as to all property withdrawn or retired, that is reported to you by the engineering department?

A. It is, sir.

Q. And you determine the amount of such property? Determine the amount which represents such

17249 property?

A. I determine the cost of such property.

Q. Well, you told me that it was not cost?

A. I did not.

Q. It was an estimate?

A. I did not tell you any such thing.

Q. Well, where do you get the cost?

A. From our books of account.

Q. Of the mains, for instance?

A. From our books of account.

Q. That isn't the cost, you told me.

A. I did not. I distinctly told you it was cost.

Q. You said it was an estimate made up by this

17250 man, I have forgotten the name of the man.

Mr. Ransom: I object to it as fully covered.

The Master: Objection sustained on the ground that I ruled last Thursday, that this company having issued stock on the basis of par—

Mr. Chambers (interrupting): Yes, I know that.

The Master: For the amount figured as the value of this property by this Rowland appraisal, the amount of stock issued for those mains, was the cost of those mains to this company.

Q. Well, you determine the amount as you find it in the Rowland report?

A. Yes, I do. I had the Rowland appraisal figure.

Q. Beyond that you did not determine the cost?

A. There was no reason why I should, your Honor.

Mr. Ransom: I object to that.

The Master: Just answer the questions. If you did not, just say you did not.

The Witness: No, I did not.

Q. And then afterwards you determined the credit that should be made to the fixed capital account?

A. I do.

Q. "As to the property withdrawn or retired," is that right?

17252

A. As to all property retired from service.

Q. Now, what do you say as to the property that ceased to be used that was reported to you?

The Master: He doesn't say any was reported to him.

Q. Was any reported to you?

The Master: He distinctly said it was not reported to him.

Q. Oh, the property ceased to be used was not reported to you direct?

A. No, sir.

Q. You never had anything to do with that?

A. Nothing whatever.

Q. Who does have to do with that?

17253

A. If there were any property that were not used in the operations of the business, it would be a matter of knowledge to the engineering department and presumably to the executives of the company.

Q. How does that get in your books?

A. I have just told you it don't get in my books.

Q. At all, it is not there?

A. The withdrawal—all property that may be temporarily disused or otherwise, does not get out of our assets in the books of account.

17254 Henry M. Brundage, Cross.

Q. When I ask you about property that ceased to be used, it does not mean temporarily?

A. And I distinctly told you, sir, that when you used the phrase "ceased to be used," you were dealing with a question in respect to which I could not testify.

The Master: You draw a distinction between the statement "ceased to be used" and "retired" and "withdrawals"?

The Witness: Yes, sir.

The Master: In other words, until the en-
17255 gineering department figures that they have no further use for the property and order it retired or withdrawn, you still take it as being used in the gas business?

The Witness: I still carry it in our books at its original cost.

Mr. Ransom: This "ceased to be used" relates to the gas business, I take it?

The Master: Yes. But the point Mr. Chambers is trying to make is what is being done with property that is not being used, but which has not been formally withdrawn from the service; and this witness's testimony is that prop-
17256 erty which may not be actually used, but which has not been formally withdrawn from the service or retired formally, is carried as an operating asset.

Mr. Ransom: Property asset.

Q. Is all property which is removed, either withdrawn or retired from the service?

The Master: I don't get that, Mr. Chambers.

Mr. Chambers: Property that is removed.

A. All property that is removed is reported to the accounting department and is withdrawn from our assets.

Q. It is then retired and withdrawn?

A. Yes.

Q. Do you check up in any way the accuracy of the reports made by the engineering department, which you stated a moment ago?

A. As to the withdrawals of physical property, no sir.

Q. Or as to any of the reports in regard to the withdrawal of property?

The Master: What else could there be?

Mr. Chambers: I don't know.

The Witness: When the engineers report that 17258
they have dismantled or withdrawn a piece of property from service, and they make that in the form of a written statement to the accounting department, I accept their statement as a true statement of fact.

Q. Therefore, you do not check up in any way the accuracy of their report?

A. Have no way of doing it.

The Master: Well, you don't check it up?

The Witness: I do not.

Mr. Chambers: The trouble is he doesn't answer the questions point blank.

The Witness: Pardon me; I want to answer 17259
them.

Mr. Chambers: "Yes" could have solved that inquiry.

The Master: Or "no."

Mr. Chambers: Or "no" in that case.

Q. If the engineering department fails to report promptly when any property is retired or withdrawn, or fails to report at any time such withdrawal or retirement, it would never appear upon the books of account of the company, would it?

Mr. Ransom: I object to that.

17260 Henry M. Brundage, Cross.

The Master: Read that.

(The question was read by the stenographer as follows):

"Q. If the engineering department fails to report promptly when any property is retired or withdrawn."

The Master: You see I won't allow that question because it is inconsistent in itself. The mere fact that the engineering department does not report promptly, does not convey any such notion as you have in your question, that it does never appear upon the books, because it might very well appear upon the books it is ultimately reported, don't you see? Do you get my point?

17261

Mr. Chambers: Yes, but I think the question is a proper question, nevertheless.

The Master: I don't think I will let the witness answer.

Mr. Chambers: I want to know what happens when they do not report promptly?

The Master: Well, they ultimately do report.

Mr. Chambers: Yes.

The Master: I will let the witness state what happens if there is a delay in reporting a withdrawal for some time after the actual withdrawal, what happens.

17262

The Witness: When any property is withdrawn from service, two things happen before I get a report from the engineering department. There is almost invariably some labor charges in connection with dismantling, which is the cue to the accounting department that there is a demolition process going on at a certain given point. Secondly, we get a cash receipt for the salvage from the withdrawn articles, which is a second cue, and if in due course, after a month or two, we do not get a record from the engineer-

ing department to tie in with those two items, debits and credits, we want to know why.

Q. Well, we are asking you not that but we are asking you what happens if the engineering department fails to report within a reasonable time, or promptly, the property which is withdrawn, and ultimately sometime or other do report it, what happens in that case?

A. I thought I had answered that question, but I will try to make it more clear, that with those two items before us as a cue, we go to the engineering department and ask them to at once turn in their 17264
report, which they would do, unless there was some specific reason why it should be delayed for another month.

The Master: In the meantime it is carried as an asset?

The Witness: Yes, your Honor.

Q. And until that report does come in, it is carried as an asset?

A. Yes.

Q. Sometimes carried as an asset for a long time, isn't it; maybe for six months or a year?

A. Oh, no, not as long as that, I shouldn't think.

Q. You don't think as long as that? 17265

A. No.

Q. If they do not report for six months, it is carried for the six months as an asset?

A. It would be carried as an asset until the report was in hand.

Q. And it would be carried as an asset until they did report ultimately?

A. Yes.

Q. And so long as they withheld the report, it would be carried as an asset?

A. It would.

Q. Regardless of how long that was?

A. Yes.

Q. Because you could not tie it up until they had made their report?

A. Right.

Q. Until that department had made its report?

A. We can't do anything until we get that report.

Q. Do you know of your own knowledge whether all the property actually retired or withdrawn or that —you object to the phrase, "ceased to be used," so I will leave that out—or that has become useless,

17267 has been reported to you?

A. Read that question again.

The Master: I am going to ask you to subdivide that question. I will direct you to ask the witness first whether he can state of his own knowledge whether all the property that up to this time has been withdrawn has been reported.

The Witness: I cannot.

The Master: Can you state whether up to this time all the property which the company has ceased to use has been reported?

The Witness: I cannot.

Q. Do you know of your own knowledge up to

17268 this time whether all property that has become useless has been reported to you?

A. I do not.

Q. Take for illustration the coal and water gas plant at West 44th Street. You know, do you not, that both coal and water gas were formerly made at West 44th Street and 45th Street?

A. I know that that station was originally a coal gas plant, was converted into a water gas plant somewhere about 1904 or 1905, and the entire plant is still carried on our books at its cost.

Q. Now, it is not being operated today?

A. 44th Street as a manufacturing station is no longer operated.

Q. And yet you are still carrying it as an asset?

A. I am.

Q. Has the engineering department reported to you yet that they have retired that plant?

A. They have not.

Q. Not yet?

A. No, sir.

Q. The water gas plant—did you say you knew that they made water gas at that plant?

A. Yes, that was a water gas station. 17270

Q. Now, that water gas plant has actually been removed—you know that, don't you?

A. A considerable portion of it, I believe, counselor.

Q. And yet you are carrying that as an asset?

A. I am.

Q. Although the property has been finally removed?

A. Yes, sir.

Q. How long ago was that removed, speaking of the water gas plant at the 44th Street station?

A. I should say three years.

Q. And you have been carrying it those three years 17271
as an asset?

A. Yes, sir.

Q. Now, is there any other plant that has been removed that you are carrying as an asset, like that, or similiar?

A. No.

Q. None other?

A. We have only had two proceedings of that kind that I recall, West 18th Street and West 44th Street.

Q. What did you do with the West 18th Street?

17272 Henry M. Brundage, Cross.

A. All written off.

Q. You finally did that?

A. Yes, sir.

Q. How long did you carry that as an asset before you wrote it off?

A. We carried that until the city paid us the award which had been made as a result of long litigation.

Q. How long was that from the time you ceased to operate it until the city paid you the award?

A. Of course I am speaking from memory now.

17273 Q. Yes. You could give that to me accurately?

A. Well, I know the city paid us the first award in the year 1910, and at that time we wrote off the property which the award paid for; and in 1913 they paid us the second award, and at that time we closed out all of the assets that had disappeared, both by reason of the condemnation proceedings, and by reason of the further uselessness of what was left.

Q. How did you treat the award that was made, as a matter of bookkeeping, for instance?

A. We credited that portion of the award for the land which exceeded the cost of the land, to our profit and loss account, and we charged the deficiency

17274 of the award for the plant below the book value of the plant, to the reserve.

Q. The book value as shown by this report you spoke of?

A. The book value as shown by our books of account.

Q. Wasn't that an old plant?

A. Yes, sir.

Q. Prior to 1884?

A. Yes, sir.

The Master: It was based on the Rowland appraisal?

The Witness: That is right.

The Master: Your book value was the Rowland value?

The Witness: Yes, sir.

Mr. Ransom: Not wholly. Of course many things had happened since the Rowland appraisal.

The Master: With the exception of such things as had been added to it.

Mr. Ransom: Plus additions, and less withdrawals.

Q. As those additions, as to pipe, etc., you used the same old Rowland appraisal? 17276

A. We did not.

Q. You said you did?

A. I didn't say any such thing.

Q. You said that all street mains and services—

A. You are talking about a plant, and plant has nothing to do with street mains.

Q. There was nothing in there that was added that you did not use the Rowland appraisal for?

A. I used the Rowland appraisal for all of the 18th Street plant that went out of service, with the exception of such additions as were made from 1884 to the date when the plant was withdrawn.

Q. What were they? 17277

A. Those were taken at actual cost.

The Master: And less any withdrawals?

The Witness: Less any withdrawals.

Q. How did you figure the cost of those that were acquired subsequent to the Rowland report?

A. Why, they were a matter of record in the books of account.

Q. You picked them out from the books of account?

A. Absolutely.

Q. You didn't have any personal knowledge of it?

A. I had personal knowledge of the account.

Q. I mean, you didn't know what the stuff cost, of course, did you?

A. Why, of course, I did.

Q. You knew what it cost?

A. Why, when the engineers report that they have withdrawn a certain piece of property, by consulting with them if I do not know it personally, I can determine from the books of account what that piece of property costs.

Q. You haven't any personal knowledge about it, have you, except what is shown in the books?

17279 Mr. Ransom: I think I should object to this line of inquiry, or at least call the master's attention to the bearing it has. A lot of this time is being taken up with respect to two items of property which had been taken by the city even prior to the previous 80 cent gas case. They did not even figure in that suit.

The Master: He said he got an award in 1910, and that he carried it on the books up to 1910, and up to 1913 as to part of it. I will allow it.

Q. The 44th Street plant was just taken recently?

A. I should say three or four years ago.

17280 The Master: I sustain that objection, however, Mr. Chambers, on the ground that it is argumentative. I thought that was what the objection was going to be based on.

Q. Will you please state how the water gas sets which were formerly operated at the 44th Street plant were written out of the capital account and charged to depreciation when they ceased to be used?

Mr. Ransom: I object to the question. There is nothing to indicate that any such thing was ever done.

The Master: Objection sustained. The wit-

ness said it was charged to reserve as I understand it.

The Witness: Not 44th Street. I have testified that 44th Street is still carried on our books at its cost.

The Master: The objection is sustained because it does not state the fact.

Q. Is it a fact that you have not yet written the 44th Street water gas sets out of the capital account?

A. I have so testified; I have not written it out.

Q. You have made no entries then upon the books of the company in regard to the 44th Street water 17282
gas sets, as to their withdrawal?

A. I have not.

Q. Have any meters been retired from use or condemned which were purchased since 1884—since 1906 is what I mean?

Mr. Ransom: Do you mean December 31, 1905?

Mr. Chambers: No, I mean since 1906.

A. Well, I am unable to answer that question accurately.

Q. Who can?

A. I cannot say definitely whether any meters purchased since 1906 have been retired. 17283

Q. Who can?

A. I should say that no one can.

Q. The books do not show it?

A. The books do not show. We made an attempt, as I testified before, December 31st, 1908, under instruction of the commission, to ascertain the serial numbers of the meters as placed thereon by the manufacturers, but going back to 1906 that was not done.

Q. If you determined the number of the meter could you not determine from the manufacturer when it was sold to your company, or can't that be done?

A. It is not a matter of record now, Counsellor.

Q. You mean the company that sold it?

A. The company that sold it might have that number. I know we did get that information as of December 31st, 1908, but we did not go back to 1906, and I have not the information now available. It might be possible to obtain it.

Q. Have any services been removed, cut off or abandoned that have been installed since 1906?

A. The same answer: that is to say I don't know.

Q. That is exactly the same situation as with reference to meters?

17285 A. No. It has not the same date; the same attempt to divide the accounts as of December 31, 1908. All of the services that we are withdrawing and have been withdrawing for many years, have been withdrawn at the Rowland appraisal 1884 price.

Q. Would not the record of the company show something in regard to these services about that?

A. No, sir.

Q. When they were installed?

A. No, sir.

Q. Would not the job tickets show it?

A. No, sir.

Q. So if the service on a certain street, installed

17286 there in a man's name, like Smith—you could not tell when?

A. That particular service was laid? No, sir.

Q. No one can, then?

A. No, sir.

Q. Have any mains been removed, cut off or abandoned that have been installed since 1906?

A. The same general answer to that question, Counsellor.

Q. You could not state?

A. We removed small parts of mains with quite some frequency, but we are unable to say definitely during what year that particular piece was laid.

Q. That is to say, your books do not show when the mains have been removed or cut off or laid?

A. No, sir.

Q. Nobody can tell that?

A. No one can tell that.

Q. Can you give for any recent date the length of mains which were not in use but in the ground upon that date?

Mr. Ransom: I object to this line of examination.

The Master: I will allow it.

Mr. Ransom: Exception. Of course, this 17288
is obviously an examination of this witness on the company's property accounts, as shown in the books.

The Master: That is correct; he has testified from the books. He is subject to cross-examination with reference to any item in the books.

A. The last record I have is as of December 31, 1918, at which time the street department reported to me there were no mains at that time temporarily disused.

Q. That is the best answer you can make to that question.

A. Yes, sir.

17289

Q. Do the records of the company show mains that were not in use but in the ground upon any recent date?

A. Not in any of the records of the accounting department, Mr. Chambers.

Q. Why do you limit it to "not in any of the records" of the company?

A. Because I believe if there were such things the Street Department would have them.

Q. The Street Department of the city?

A. No, the Street Department of the company.

17290 Henry M. Brundage, Cross.

Q. Who would know, then, about that?

A. Mr. Woods, our engineer, or Mr. Simpson, the head of the Street Department.

Q. Are all the expenses connected with the laying of mains, whether for the Consolidated Gas Company or for the other allied companies, charged to a fixed capital account as they are incurred.

A. All expenses incurred in laying mains for the Consolidated Gas Company are charged to its fixed capital account. If any mains were laid by our Street Department for the account of another company,

17291 it would be billed to them.

Q. You mean originally charged to the fixed capital account of the Consolidated Gas Company?

A. For our own mains? They would be charged directly to the fixed capital account, street mains.

Q. When you lay a main for one of the allied companies you first charge it to the fixed capital account of the Consolidated Gas Company before you bill it to that company, do you not?

A. If there were such a case, that I don't at the moment recall, Counsellor, I should be inclined to say yes, we would charge it to the street main account; and when it was completed we would then bill it to

17292 the other company and credit the Street Department.

Q. Why do you hesitate on such a question? You lay mains for other companies and you charge it to the capital account of the Consolidated, do you not, first off?

A. You make the very bold assertion that we are laying mains for other companies, and I am trying to think of a case where we have done it.

Q. Do you mean you have any doubt about that?

A. There have not been any mains laid in quite a few years, that I know anything about, but if we were to lay those mains we would charge it to the

street main account and when we billed the other companies we would credit the street main account.

Q. Have you not been doing that since 1906—what I have indicated?

A. I should be inclined to think so, yes.

The Master: I did not catch what you were indicating there.

Mr. Chambers: We are on this subject of the laying of mains for the allied companies, and that he charged the expense to the capital account of the Consolidated Company.

Mr. Ransom: He did not say they were 17294
charged to the capital account.

Mr. Chambers: Yes, he did, too.

Mr. Ransom: They are charged to the street main account.

Mr. Chambers: That is a capital account, is it not?

The Witness: Yes.

Mr. Chambers: Then I am right: they charge it to the capital account of the Consolidated first, and then they bill it.

The Master: Then what happens after that?

The Witness: It is credited to the account.

Q. Then you credit the capital account with what 17295
you charge these companies?

A. No, we bill it.

Q. Whether you get the money or not?

A. Yes.

Q. So the result of the entry is that there is no charge to capital account for the other companies?

The Witness: None whatever.

Mr. Ransom: Mr. Chambers, I think, has confused the difference between the capital account—he is simply playing upon words. These things are not in any way charged to the capital account of the company.

Mr. O'Brien: Why not let the witness tell us that?

The Master: I understand the witness's testimony. He says the street main account is a capital account.

Mr. Ransom: A capital account.

The Witness: It is.

The Master: This is charged to a capital account, but not to the capital or fixed capital of the company.

Mr. Ransom: It does not go into fixed capital
17297 at all.

The Master: It is the difference between the capital and the fixed capital accounts of the company.

Q. It is a fixed capital account, is it not?

Mr. Ransom: I object.

The Master: I will let the witness answer.

A. Ask your question again.

Q. It is a fixed capital account, is it not, this account?

A. Why, yes, I would say the street main account is one of the capital accounts.

Q. So that the charge for laying mains of other
17298 companies, where you lay mains for other companies, is in the fixed capital account for a time, until you bill them?

The Master: Is in this fixed capital account.

Mr. Chambers: Is carried for a time by the Consolidated?

A. Yes.

Q. Can you recall how long you have ever carried such an account for a company?

A. Temporary construction? No, I cannot.

Q. Well, any kind of construction.

A. No.

Q. Why do you call it temporary construction? You are laying a main; that is not temporary construction, is it?

A. But it is temporary as far as our accounts are concerned, Counsellor, and it simply goes in there for the purpose of gathering all the items together and at the end it is simply billed to the other companies and the account closed.

Q. Have you carried it for as long as six months?

A. I do not recall such an item.

Q. That is, you do not recall where you ever have done that? 17300

A. I do not recall carrying it for any such time, and I do not recall that we have a case in recent years.

Q. Have you ever carried an account more than a year?

A. Not to the best of my knowledge.

Q. For two years?

A. Not to the best of my knowledge.

Q. Ever as long as three years?

The Master: I will not allow it. The witness has stopped at a year.

Q. You mean you do not know?

Mr. Ransom: He does not mean that at all.

The Master: He says not to the best of his 17301 knowledge.

Q. You would not say you have not carried it as long as two years?

The Master: Or three years?

A. I do not believe we ever have.

The Master: What do you think is the longest you have ever carried an account of this kind?

The Witness: It does not seem to me that a case of that kind, your Honor, could be carried in our accounts more than a few months.

Q. Do you know?

17302 Henry M. Brundage, Cross.

Mr. Ransom: I object to the question. It has been already fully covered.

The Master: I will allow it.

A. I cannot sit here and tell you definitely without going over all our accounts for all these years under examination, Counsellor.

Q. Can you not tell generally?

Mr. Ransom: Objected to.

The Master: That objection is sustained to that. I think it has been fully answered.

Q. When are the charges in such a case entered
17303 upon the books of the company

The Master: What kind of a case?

Mr. Chambers: Such a case, where you lay mains for other companies. The question is when?

A. When the project is completed.

Q. Is it not when the expenditures are incurred, as they are incurred?

A. I should say not.

Q. You wait until the main is all laid, then you put it in there?

A. If they are billed, Counselor, when the expenses were incurred, then the capital account of street mains
17304 would be closed at once.

Q. I did not ask you that. I was asking you when you enter upon the books of the company the expense of laying a main for an allied company?

A. My answer will be when the project is closed or completed.

The Master: Suppose it takes a year or two to finish the job and in the meanwhile you have spent a great deal of money?

The Witness: It does not take a year or two to lay small pieces of main, your Honor.

The Master: Suppose it is a large piece.

The Witness: There has not been any laid in my time.

Q. You do not charge the labor up, then, month by month?

A. No.

The Master: If the job did take a long while, you would be losing interest on this expenditure, would you not?

The Witness: If we were laying large mains for some one else, your Honor, we would make a special project of it.

Q. Do you know about the transmission main that 17306
was laid in the Bronx by your company for another gas company?

A. I know about a transmission main laid in the Bronx, paid for by the Consolidated Gas Company and still carried in its assets.

Q. Was there not one that was built for another company in the Bronx, a main?

A. No.

Q. No other that you know of?

A. No other that I have any recollection of, sir.

The Master: Was there another one that you know about, Mr. Chambers? If so, I think you ought to direct the witness's attention to it and he 17307
may recall it.

Mr. Chambers: Yes, there was, but we have not the detailed information here.

The Master: Do you know where it was generally? You see, what we want to do here is to get the facts, and if there is a main of that kind let us call it to the witness's attention and get the information.

Mr. O'Brien: It is a matter of testing the witness's memory.

Mr. Ransom: Mr. Chambers ought not to

make insinuations unless he has some facts about them. Those are the tactics he has been pursuing all along.

Mr. Chambers: That is another one of your wild statements, Judge, without any backing for it—not a scintilla of foundation for it.

The Master: I do not know how wild the statement was, but I know how unnecessary it was.

Mr. Chambers: He is repeating these statements without any foundation with which to
17309 back them up. That is one of them.

Mr. O'Brien: One of the purposes is to find out how much this chief accountant knows about the books of the company. They were received in evidence under his sworn statement.

The Master: That does not appeal to me so much.

Mr. O'Brien: He ought to know something more than the bandman who brought them down here.

The Master: No, the point I want to bring out here is that in this kind of a case we ought to have the information if it is available. If the
17310 engineers for the defendants have in mind a main that was built for somebody else, let us have a reference to it so that we will know about it. I do not think we get anywhere by this mysterious reference to a main.

Mr. Chambers: We did not expect there would be any question about it; we supposed he would know and tell us.

Mr. Ransom: Don't you know about it?

The Master: What main is it?

Mr. Chambers: I do not know.

Mr. Ransom: Does Mr. Hine know about it or does Mr. Edgerton know about it.

Mr. Chambers: I do not think we are under a cross-examination yet, your Honor, either Mr. Hine or myself, and when we are we will know about it.

The Master: No, but I think under the Master's request for the proof you would tell us.

Mr. Chambers: Yes, on that account, you have a right to address me.

The Master: You have a right to say what main Mr. Hine had in his mind.

Mr. Chambers: Yes, and Mr. Hine said there was a main involving a good deal of expenditure, 17312
but that he has not the data, because he did not anticipate that this witness would show such a lack of knowledge of these books and company's affairs, and if we were able to anticipate that we would have had the data here.

Mr. Ransom: You did not think the witnes ignorance was as great as that of the defendants?

Q. As to mains laid by the Consolidated Gas Company for other companies, when are these other companies charged for the cost of those mains? That you have answered?

A. I have answered that question.

Q. As fully as you can? 17313

A. Yes.

The Master: When the project is completed, he said.

Q. Now, one of the mains to which that referred is a 48-inch main that was charged to the Mutual and the Standard in 1906, 1907 and perhaps 1908. Do you remember such a main, involving a large expenditure of money, 48-inch main 1906, 1907 and 1908?

Mr. Ransom: In the Bronx?

Mr. Chambers: To the New Amsterdam company and the Standard?

Mr. Ransom: In the Bronx?

The Master: You said Mutual a minute ago.

Mr. Chambers: I did not say the Bronx.

Mr. Ransom: You did say the Bronx.

The Master: You said the Mutual before. Do you mean the New Amsterdam?

Mr. Chambers: The Mutual and Standard, I think it is; the Mutual and Standard.

The Master: Well, you said the Bronx before.

Mr. Chambers: Well, then I made a mistake.

The Master: Do you remember the 48-inch
17315 main was charged to the Mutual and Standard or New Amsterdam and Standard during these years, 1906, 1907 and 1908?

Mr. Chambers: Built by the Consolidated Gas Company?

The Witness: Have you any idea of the location of it?

The Master: Wouldn't the books show?

The Witness: Yes.

The Master: Wouldn't your operating ledger show for 1906, 1907 and 1908?

The Witness: We may be able to locate it. Shall I?

17316 The Master: Yes, try it.

The Witness: Yes, sir (examining book).

The Master: Did you find something?

The Witness: Yes, sir.

Q. What did you find?

A. I find back in the year 1906 that we advanced certain labor and material for building a 16-inch and a 24-inch main, charges running through the year which after December of that year were billed to the New York Mutual Gas Light Company.

Q. You find that on page 29 of the Operating Ledger?

A. Yes, sir.

Q. The Operating Ledger for 1906, which is Exhibit 260?

A. Yes, sir. In the same ledger at folio 70 I find where a small amount of labor and material was advanced for laying a main, the details of which are not before us, but at the end of the year the amount advanced, fourteen odd thousand dollars, was billed.

Q. Was that the whole of that account?

A. I am unable to say without the rest of the details before me.

The Master: You don't know who it was billed to or charged to? 17318

The Witness: No, I cannot tell from this ledger.

The Master: How do you happen to have a ledger account charging somebody with work for which you cannot give the details?

The Witness: Your Honor, this record for laying these large mains, we had a detailed slip pasted in the ledger, showing all these sums, but it happens they have taken a portion of the page out, but the sundry debtors' blotter will be the record for the details, who it was billed to, and the amount being fourteen odd thousand dollars. 17319

The Master: Who was it billed to?

The Witness: Street mains, 36-inch.

The Master: So it was an uptown main 36-inch built for somebody?

The Witness: Yes, and from the record here it is the north side of 71st Street, which has been torn off.

Mr. O'Brien: Do you use these stickers often?

The Master: I won't permit it.

Q. Who tore off the sticker?

A. Some of your examiners.

Q. Why do you say that?

A. Because the—

The Master: That is his only guess.

Mr. Chambers: Well, you ought to have some foundation for the charge you make.

The Master: I have eliminated the charge. The stenographer will note in the record that at folio 29 there is a typewritten paster given considerable detail as to the location of the main designated as 16-inch and 24-inch downtown line Mutual Co., and then the details of the 24-inch
17321 and details of the 16-inch, and it would appear on folio 30, that there was something pasted on there, and what is left of it is the following, "To N. S. of 71st Street." It is quite apparent that that has been torn off. It will also be noted that the paper pasted on folio 29, as I hold the book in my hand, is folded over and reaches out beyond the page, so that it would be easily torn off in the handling of the book. If the slip pasted on folio 30 were in any such position, it would likewise be easily torn off in the handling of the books back and forth to the court house. It is only fair to say that this might have been torn
17322 off in a dozen different ways by the handling of this book by either the employees of the Gas Company or by the engineers or in any other way.

Mr. Chambers: Unless they withdraw that and strike it from the record, the charge stands that the employees of the defendants tore it off, and I shall have to call and make an issue—

The Master: You don't have to make an issue of it because I shall rule now that there is nothing to base that statement upon, and I assume Mr. Brundage, it was simply your in-

ference that the books have been handled so much by the defendants' employees, that you assume it must have been torn off from their handling of it?

The Witness: I do.

The Master: That is all you meant by that?

The Witness: That is all I intended.

Q. Well, you haven't any basis for that?

The Master: That is objected to and the objection sustained.

Mr. Chambers: If they lose the case they will say we mutilated the books. That will be the 17324
next step.

The Master: Is it common practice to paste these slips in these operating ledger folios?

The Witness: No, your Honor, because the details of all the physical descriptions is all kept by the Street Department, but these were rather larger projects, and for the benefit of the accounting people we had these pasters prepared and pasted in.

Mr. O'Brien: For the benefit of the accounting people?

The Witness: For the benefit of the accounting department of our own company. 17325

Q. This account to which you call attention here opens up with a balance of $54,333.29 showing, does it not, that it was not begun here, that it covered more than this year?

A. That would indicate that that much money had been spent in the preceding year and was carried forward to this year.

Q. And that is some downtown or uptown main?

A. Yes.

Q. Downtown main there?

A. Yes, sir.

Q. Now I see you carry the pay roll here?

A. Yes, that is the pay roll of our own company.

Q. Well, you told me a little while ago that you did not charge up the labor from month to month on this kind of work?

A. I repeated it.

The Master: He said they did not bill it until the project was completed.

The Witness: Yes.

Q. It was the pay roll, you said. What I meant when I asked you that question was, did the Consoli-
17327 dated Gas Company charge up from month to month the pay roll on the work as you were laying the main?

A. To the project?

Q. Yes.

A. Absolutely. That wasn't your question.

The Master: I thought you meant whether they billed it out.

Mr. Chambers: Oh, my no, he told me they did not bill anything until they were all through with the work.

The Master: That was my understanding.

Q. Well, you did charge up the pay roll as you proceeded with the work?

17328 A. Absolutely.

Q. Are those the only two that you are able to find? Here is another.

A. I find this item on the same page.

Q. Speaking of page 30 of the same exhibit?

A. Yes. I also find an item entitled 36/30 inch downtown main which was charged in December of 1906 to some other company.

Q. It seems to be a very large account of $180,000; in fact, it ran up into a million, didn't it?

A. Oh, no.

Q. What is that?

A. $171,000.

Q. Well, up here it is $180,000?

A. Yes.

Q. That is a pretty good size account. Do you know what company that was laid for?

A. I do not. The detail record sundry creditors would tell the whole story.

Q. You have got here, and I do not understand it, a profit and loss adjustment of $8,587. What is that?

A. I am unable to tell you from that record. The 17330
journal entry for August, 1906, in folio 139, will tell the whole story.

Q. Then you have a profit and loss adjustment down here of $862?

A. $862.41, yes, sir.

Q. In other words, what did you do, collect more than you paid out? It looks so.

A. I could not say from that record.

Q. Well, it looks so, doesn't it? Here is that $171,000, apparently what the work cost, and what you paid out for pay rolls, isn't it?

A. No, that is the amount charged to sundry 17331
debtors.

Q. You don't understand that account much better than I do, and I certainly don't understand it. Can you explain it all? What is debit and credit? Here is debits and credits. Can you explain that at all as a bookkeeping proposition?

A. Why, to get the full explanation of that account, Mr. Chambers, it will be necessary for you to go back to this sundry debtors' record. It appears that in December, 1906, an account was credited with this amount, $171,744.45, being the amount which was

shown in the account up to that date, and that entry closed the account. Then two further transactions happened, sundry debtors debits and sundry debtors credits, for substantially the same amount, the difference being the little item of $862.41, and the journal in December, 1906, will show specifically what that was and what it represents.

Q. You cannot tell?

A. Not from that record.

Q. Did you see any other for 1906?

A. No, that is all I noticed in that ledger.

17333 Q. Now, you did not look in any other year?

A. I did not.

Q. But here are three substantial amounts for construction of mains for other companies.

The Master: Objection sustained.

Q. Well, here are three anyway.

The Master: Objection sustained.

Mr. Ransom: This was selected after consultation with Mr. Frank.

Mr. Chambers: That is not correct at all. It was not selected. You asked the witness to go and select these.

The Master: I did not hear what Judge Ransom said.

17334

Mr. Chambers: We did not select these at all. He said that was selected by us after a conference with Mr. Frank. We did not select them.

Q. Didn't the Master ask you to go and see if you could find one, and didn't you find these?

A. He asked me, and I went and looked at the 1906 ledger.

Q. Did I select them?

A. This ledger, no. I selected it.

Q. That account. Who selected these three accounts?

A. Mr. Frank suggested to me that those were the mains he was talking about.

Q. Did Mr. Frank select them?

A. He did.

Q. These three mains here in court?

A. Yes, within ten minutes. He suggested those were probably the mains you were asking about, and I was glad to testify about them.

Q. Didn't the Master ask you to go and see the book, and didn't you find these?

A. Yes.

Mr. O'Brien: And you consulted with Mr. 17336
Teele?

The Witness: I have not spoken to Mr. Teele.

The Master: The record shows what happened.

Mr. Ransom: It did not show Mr. Frank picked these out as the ones which had been referred to by Mr. Chambers' question, the witness not knowing what his question referred to.

The Master: Did Mr. Frank go over this book with you?

The Witness: He came to me as I was standing there looking over the ledgers, your Honor, and suggested to me that those were probably 17337
the mains they were asking about.

The Master: Well, I didn't see what happened over there.

Q. Did Frank have anything to do with those questions that the Master asked you?

The Master: Objection sustained. The record shows how it came about. I told the witness—

Mr. Chambers: You asked him to go and find such an account.

The Master: I told the witness in the light of the examination to see if he could locate these

accounts and could find them. Apparently he went over there to the book, and while I was talking to counsel here Mr. Frank went over to the book and gave—

Mr. Chambers: To expedite, perhaps.

The Master: Yes, and Mr. Frank suggested that those were probably the accounts that you had reference to.

Mr. Chambers: Now here is what I object to. Counsel said that these accounts were selected after a conference between myself and Mr. Frank.

17339 Mr. Ransom: No, I did not say that.

Mr. Chambers: That is what you meant.

Mr. Ransom: I said they were selected by the witness after consultation with Mr. Frank.

Mr. Chambers: If your Honor please, I would like to see a lawyer conduct his case in an honorable and orderly way, and stick to the facts.

Mr. Ransom: That is what I am waiting for too. I would like to see it.

Q. Now, Mr. Brundage, will you please turn to this sundry debtors' ledger No. 7, complainant's Exhibit 196, and see if you can find in it those accounts to which you have just referred?

17340 The Master: For what year is that?

Mr. Chambers: 1906.

A. I certainly cannot.

Q. Didn't you tell me a moment ago that this sundry debtors' ledger would show the details of the transaction?

A. The sundry debtors' blotter would show you, but this ledger we have looked at is 1906. This ledger (referring to another book) is twelve years later.

Q. You mean this does not relate to 1906?

A. This ledger is 1918, when the ledger was opened, 12 years afterwards.

Q. The other one has not been offered in evidence, has it?

A. I think not.

Q. Now, these other companies to whom you make charges for laying mains, do you include therein a charge for engineering, superintendence and other similiar expenses?

A. My recollection is when those mains were laid—

Q. I am speaking of a situation wherever and whenever you lay a main for any company. Do you charge them with these things, to-wit, engineering, superintendence, and other similiar expenses? 17342

A. We add five per cent to the direct cost of labor and material to cover the overhead. That would include engineering and superintendence.

Q. That is the only charge that you make,that would cover engineering and superintendence?

A. In connection with laying mains.

Q. Do you make any other charge of a similiar nature?

A. In connection with mains?

Q. Yes.

A. No.

Q. How about services?

A. The same procedure would be followed. 17343

Q. Five per cent?

A. Although we have not laid any services for other companies in years, and we have not laid any mains for other companies in years.

Q. Well, we find here in 1906—

A. Well, that is 13 years ago.

The Master: That is years ago.

Q. Well, let us take the 1908 ledger.

The Master: That is 11 years ago.

Q. Well, let us take 1917.

The Master: That is better.

Q. I don't know that there are any, but let us see.

(Witness examines ledger).

A. For the month of January, 1917, I find some credits here in the street main account, through sundry debtors. Now, if you will turn to the sundry debtors' blotter for the month of January, 1917—

Q. What does that indicate?

A. That there were some charges for some small item during January, 1917, that were credited to the street main account.

Q. Showing that as late as 1917 you were carrying
17345 on some work like this?

A. Some little piece of a main.

Q. Well, a piece of a main, it is some work?

A. A little item of $800. I happened to see there.

Q. Are there any others in 1917?

A. We might go through that year.

Q. You find that one, there may be a number?

A. In the month of March I find a credit of $1,100; in the month of April I find a credit of $795; in the month of May I find a credit of $877; and in June I find a credit of $1,300; and so on in each month of the year, I find credits here representing charges to somebody, the amount of which was credited to
17346 street main account. Now, in order to identify those items and tell you what they were I would have to have the sundry debtors' record for that year.

Q. Isn't there one in October of $1,691.14, and so on? They seem to be running all through in different months?

A. Yes.

Q. Now, let us take 1916, and see what that would show. Let us see what Exhibit No. 270, being the operating ledger for 1916 shows?

A. I find in January a credit of $219 in February a credit of $530; in March a credit of $1,287; in

April $1,214; in May, $1,107; in June $329; in July $735; in August $1,581; in September $2,740; in October $2,014; in November $3,362; in December $2,315.

Q. You would not lay very many mains in the winter time, would you?

Mr. Ransom: I object to the question. There is nothing to show that these are a laying of mains.

The Master: Objection overruled.

Q. Who made the determination to charge these other companies five per cent? Who was it that 17348
fixed that amount for engineering and superintendence, or whatever it was. Was it for engineering and superintendence?

A. It was for the overhead in connection with that work.

Q. Have you charged them any engineering?

A. Nothing further than that item.

Q. Did you charge them any superintendence?

A. No, sir.

The Master: He has answered that; that is in the five per cent.

Q. Who determined the five per cent?

A. I don't believe I can answer that question, 17349
counsellor. It has been the practice for many, many years.

Q. You don't know who is the father of it?

A. I do not.

Q. Where did you get your information from to do it?

A. I found that that practice was going on when I went with the company.

Q. So you followed right along?

A. Yes, sir.

Q. It has been the practice back of 1906, has it?

A. Yes, sir.

Q. If you charged these companies with five per cent as you have indicated, what accounts were credited?

A. An account that we knew before the days of the Public Service Commission as P. and L. adjustment, and which we now know as undistributed adjustment under the uniform system of accounts of the commission.

Q. Are these other companies where you have laid mains or performed work in the manner I have indicated charged for interest during the construction
17351 of those mains, or any interest upon expenditures from the time incurred until the company pays for the main?

A. No.

Q. That is regardless of how long you carried that on your books?

A. I don't recall that we ever charged them interest on any main construction.

Q. That is you might carry the payroll for six months and make no charge for the interest?

A. We never charged them interest that I can recall.

The Master: Why shouldn't they be charged
17352 interest, Mr. Brundage? It is practically money you loaned to them or advanced for them. Why shouldn't they pay interest?

The Witness: It might have been done, but it was not done.

Q. Well, it should have been done, shouldn't it?

A. That is not for me to say.

Q. It would amount to quite a substantial sum of money, wouldn't it?

The Master: I will answer that.

Mr. Chambers: Very well, I will withdraw it.

Q. Are the answers which you have made and given here today and Friday of last week applicable to mains for the period from 1905 to date?

A. Yes.

Mr. Ransom: I take it that counsel means Thursday of last week?

The Master: Yes, it was Thursday; we had no session on Friday.

Mr. Chambers: I stand corrected, I meant Thursday of last week.

Q. When materials such as pipe for mains are furnished to contractors or other, upon what basis 17354
is the price for such pipe charged?

A. When we sell pipe to contractors?

Q. When you furnish pipe to contractors or others. Isn't that clear—pipe for mains?

A. No, it is not clear.

Q. All right, virtually selling them?

A. That is not clear, we have two different conditions there. We might furnish pipe out of our stock to be employed for another company when the arrangement would be one thing, and occasionally—

Q. In that case you furnished them the pipe and they do the work?

A. Yes. 17355

Q. Well, eliminate that. Now, the other?

A. We might have and do have occasions where we have sold pipe out of stock to a contractor not often, but that has happened.

Q. Upon what basis is the charge made to the contractor in that case?

A. Invoice cost, plus cost of handling into and out of stock pile, plus fifteen per cent.

Q. Now, when you sell pipe to other companies for their use, you doing the work, what charge do you make?

A. For the pipe?

17356 Henry M. Brundage, Cross.

Q. Yes.

A. Invoice cost, plus the cost of handling in and out of store room, plus cartage, if it is incurred by us, plus five per cent.

Q. What is the fifteen per cent to cover?

A. The fifteen per cent is when we sell pipe, as occasionally happens, to some outside contractor.

Q. What is that to cover, what does it cover?

A. Well, I should say that it covered the general overhead expenses of the organization, cost of buying the pipe, executive officers and profit to the com-

17357 pany.

Q. Now, when you charged the five per cent to the allied companies for pipe that they were using themselves, what is that for?

A. That five per cent that I have spoken of is computed at the foot of the bill, and is five per cent on all the labor, all the material and all the direct expense of doing the work for that company.

Q. What is it for?

A. That five per cent is for the overhead of the organization.

The Master: I don't think the record is entirely clear, Mr. Brundage. I got the impres-

17358 sion that you sometimes sell pipe to other companies that they use with their own force, not your force.

Mr. Chambers: That is what I asked him about.

A. I do not recall, your Honor, where we had delivered pipe to another company and they used it to lay mains with, because the Street Department of the Consolidated does all the street work for the four Manhattan companies.

The Master: Then the correct statement is that pipe goes out to other companies or con-

tractor in only two ways: You sell it to outside contractors on the basis you have described?

A. Yes, sir.

Q. And you use it in doing work for other companies, charging them as you have described?

A. Yes, sir.

Q. What you said a moment ago as to that, is the true situation, that is, that there is only one company engaged in laying mains in this city, and that is the Consolidated?

A. The Consolidated Street Department does all the work of main laying for the four companies in 17360 the Borough of Manhattan.

Q. How about the Bronx?

A. They have their own Street Department.

Q. You do some there, though?

A. No, sir.

Q. Not any at all?

A. No, sir.

Q. Has the method that you have just testified to been uniformly applied and followed since 1905?

A. Yes, sir.

Q. Charging fifteen per cent and five per cent?

A. Yes, sir.

Q. Have any exceptions been made to this rule, 17361 that is, fifteen per cent and five per cent rule?

A. None that I can now recall, Counsellor.

Q. You would not say there have not been?

A. I do not believe there has been any variation of that rule?

Q. Is it the practice of the company not to remove any mains unless they are to be replaced by another main?

A. Well, as to the physical practice, how the Street Department takes care of their mains and removes them I do not know; I am not prepared to testify.

Q. Will you state specifically what entries are made upon the record of the company's books when a service is removed, cut off or abandoned, and a service of the same size is laid to the same premises?

A. That is where we cut off a service and replace it with one of the same size?

Q. Cut off or abandon or replace it?

A. There is no change in the capital account, and the cost of making the change is charged to "Repairs Services."

17363 Q. Are there any charges or credits to a fixed capital account in such a case?

A. No, sir.

Q. Where are the expenses connected with such new service charged?

A. I have just told you the cost of making the change is charged to "Repairs, Services."

Q. Will you give us a list of the accounts which are credited for work done for or materials delivered or furnished to other companies?

A. I do not know that I can make this complete, but I will try. We credit an account called gas transferred for gas furnished other companies. We

17364 have credits in all of the Street Department expenses for any work that they may perform for the affiliated Manhattan companies.

Q. I take it if you had until tomorrow you could give us a more complete answer to that?

A. You are asking a question, Counsellor, that involves the examination of hundreds of entries. I can only tell you now, standing here, in a broad way.

Q. Could you give us a full answer tomorrow?

Mr. Ransom: I object to the question.

The Master: I have not any objection to Mr.

Chambers asking the witness a question like that, but I want to see what follows. I am not willing to postpone the examination until tomorrow. If this witness's examination is completed today, we will finish with him.

Mr. Ransom: The point is, your Honor, that this witness has not told what accounts they should be charged to, because they are prescribed by the uniform system of accounts.

The Witness: Of course, your Honor, I want to make it perfectly clear to you, sir, that any expense which the Consolidated Gas Company 17366
incurs which is applicable to another company, when we bill the other company we credit the accounts that were charged from the original record, with the result that there is left in our expenses only that portion applicable to our own business.

The Master: So it might be in the labor account?

The Witness: It will be in hundreds of accounts, of both labor and material. Anything that is done for the other companies we bill to them and credit our accounts.

Q. Is any portion of the salaries of the officers 17367
of the complainant company charged to any fixed capital account?

A. No, sir.

Q. All to operating expenses?

A. Yes, sir.

Q. Is any portion of the salaries, wages, expenses of the general departments of the company, namely, accounting, purchasing, financial or engineering, charged to any fixed capital account?

A. No, sir. Did you say engineering?

Q. I said engineering.

17368 Henry M. Brundage, Cross.

A. Let me correct my answer. I testified some months ago on that feature of the engineering department devoted exclusively to construction work, and I repeat now that the engineer of construction and his two assistants and his personal staff are charged to a fixed capital account, engineering and superintendence, otherwise my answer stands.

Q. That is all?

A. Yes, sir.

Q. Is that true back to 1905, what you have just stated?

17369 A. Yes, sir.

Q. About these accounts, purchasing, financial and engineering?

A. Yes, all charged to operating expenses, except these in the construction department.

Q. Is any charge made to a fixed capital account for interest during construction?

A. No, not in the case of the Consolidated Gas Company.

Q. Is any charge made to fixed capital account for taxes during construction? The last I asked you was about interest—for taxes during construction?

A. No.

17370 Q. Reference has been made to the work which was performed by the Consolidated Gas Company in connection with the war. Was any expense incurred by the Consolidated Gas Company, directly or indirectly, connected with war work?

A. Yes, we had a specific item of expense which we called Defensive Emergency Service. It consisted in the expense incurred in protecting ourselves against the risks which we felt it was necessary to protect ourselves against.

Q. For instance, extra corps of watchmen?

A. Extra corps of watchmen in all of those places that might be called vulnerable points.

Q. You discontinued that?

A. That has been discontinued, yes.

Q. It was extraordinary?

A. An extraordinary expense.

Q. And extraordinary situation or affair?

A. Yes, sir. We felt it was something which should be done during the war period.

Q. Was watchmen the only expense you incurred because of the war?

A. That is all that I recall at the moment, sir.

Q. That was for your own protection?

A. For the protection of the property. 17372

Q. That was not to help the government in any way, but to protect your own property?

A. To protect our own property.

Q. That was paid to the Edison Company, was it not?

A. Most of that money was paid to the Edison Company.

Q. That is, you did not hire the watchmen and all that; you paid them $10,000 a month, did you not? Is that correct?

A. No, it is not correct.

Q. You paid them what sum—the Edison Company? 17373

A. No stated sum. The Edison organization had a lot of watchmen available, and at our request they furnished the necessary force to patrol these various plants and points that we felt needed protection.

Q. And you paid the Edison Company?

A. And they billed us for the cost to them, and we paid them for it.

Q. What did you call that?

A. Defensive Emergency Service we called it in our accounts.

Q. When did you begin that, do you remember, about?

A. Well, it ran through practically the period of the war, Counsellor. I cannot at the moment tell you the exact date, but it is a matter of record.

Q. Is it set up in a separate account?

A. Yes.

Q. And it amounts to over $100,000, does it not?

A. I should say yes. I will confirm that here. (After consulting book.) $100,000 in round figures in the year 1918.

17375 Q. Who had charge of that, do you know?

A. What feature of it, Counsellor?

Q. The work, or anything about it?

A. Of looking after these people?

Q. Yes.

A. Why, our Engineering Department.

Q. Whom did you get your reports from?

A. I got reports from the Engineering Department at the end of each month as to the number of men employed, from which to confirm the accuracy of the bill.

Q. A separate pay roll for that?

A. Yes, a separate bill was rendered for it.

17376 Q. Was there a pay roll or time book kept of it?

A. Not as far as I know in my own department, but I believe the Engineering Department did keep such a record.

Q. Why is it you do not know whether there was a pay roll kept of it?

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

A. Because the bill reached me approved by the chief engineer and the president of the company.

Q. And you charged it up that way in the books?

A. I did, sir.

Q. And you charge everything up that way that comes in with the approval in that way of some head of some department?

A. No, I would not say that.

Q. You made no investigation about it, did you?

A. When I had this bill before me, properly approved by the chief engineer and president of the company, that was sufficient authority for me to pass the bill through for audit and payment.

Q. Who was the bill to—went to whom?

A. The New York Edison Company.

Q. From whom was it? 17378

A. The bill was to the New York Edison Company?

The Master: No, it ran to the New York Edison Company.

The Witness: The bill was rendered by the New York Edison Company to the Consolidated Gas Company.

Q. Did it state the number of men employed or just a lump sum?

A. The bill stated the amount paid during a certain period to men engaged on this work.

Q. What gas companies were involved in that—all of you, all of the allied companies? 17379

A. Yes, I believe so.

Q. That is, you paid the amount to the Edison Company to protect all these gas companies?

A. Yes, sir.

Q. Mains and holders?

A. All these vulnerable points, and billed those companies for their share.

Mr. O'Brien: I move to strike out the words "vulnerable points."

The Master: No, I will let it stand.

Mr. O'Brien: As a conclusion on the part of the witness.

17380 Henry M. Brundage, Cross.

The Master: I will let it stand.

Q. What do you mean by vulnerable points?

A. That is a term the engineers used, Counsellor, and I repeat it as a good phrase. Those points that they felt needed protection.

Mr. O'Brien: You used it in quotation marks?

The Master: Objection sustained. Do not answer Mr. O'Brien's questions until the time comes for his cross-examination, Mr. Brundage.

Q. What did you do with the other companies?

A. We billed them for any amount that was in-
17381 cluded in those charges applicable to them.

The Master: How did you determine what was applicable to them?

The Witness: From a record that reached me from the Engineering Department, your Honor, which gave us the number of days at each of these points. At a given point, for instance, would be the Central Union's plant, the New Amsterdam plant, or some other plant, and that amount was billed to them.

Q. Who would determine their proportion?

A. The Engineering Department records showed me the number of days applicable to them at each of
17382 these points.

Q. How did the Edison Company know it—when you got all your bills from the Edison Company?

A. Yes.

Q. How much, did they know—how much time was spent on the Standard's property?

A. I do not know that they did know it.

Q. The bill from the Edison Company was for all of the work?

A. Yes, sir.

Q. Who had charge of it in the Edison Company?

A. I do not know.

Q. Who is E. J. K. here in this, on the sundry debtors' ledger, page 87?

A. I should say that was Kenney. I know there is such a man in the Edison outfit, E. J. Kenny, and the bill of the Edison Company did refer to him. I think it stands out on the face of the bill.

Q. He was chief of the detectives, I suppose?

A. I do not know the man, so I cannot tell you specifically who he is, Counsellor.

Q. You said you had a separate account for this?

A. Yes, we kept a separate account for it.

Q. With the credits as paid in by the other com- 17384
panies?

A. And that account was credited with whatever was charged the other companies, yes, sir.

Q. Where is that account, speaking of the Defensive Emergency Service Account, in the report of the Public Service Commission—the last report which was filed this spring?

Mr. Ransom: Referring to exhibit what? What is that exhibit for identification?

The Witness: My copy is not marked. You filed the Commission's own copy.

A. In the company's report to the Public Service Commission for the year 1918, in Schedule 572 on 17385
line 12, you will find these words: "Miscellaneous General Expenses, including Defensive Emergency Service of $100,251.89." Did you charge it as an operating expense?

A. We did.

Q. Were there many charges for this in 1917—for this account?

A. I think there was, Counsellor, but I cannot testify positively. If you have the ledger here we can confirm it in a minute.

Q. Just find the account and give it to us, please.

A. I do not find there is any charges in 1917 of that nature.

Q. Now, 1919?

A. I find there were two charges here in January and February accounts of this year of substantially the same amount as we carried monthly in the preceding year, and in the succeeding months of this year, beginning with March, they drop to about $100 a month.

Q. How are you carrying it on now?

A. I can't answer that question, Counsellor.

17387 Q. I was asking you about this emergency expenditure for 1919, and you said you had carried that on for the same amount per month with the exception of the last two months?

A. No.

The Master: Since March he said at about $100 a month.

The Witness: They carried it on for the same amount for about two months of this year; and then beginning with March it dropped to about $100 a month.

Q. How are you carrying it for October?

A. I find a charge in our September account for

17388 about $100.

Q. How about October, just passed?

A. No charges yet. Our October accounts are not closed yet.

Q. That was $10,000 a month for January and February, was it?

Mr. Ransom: There is no indication that it is ten thousand a month. The figure is not ten thousand a month.

The Master: Objection sustained.

Q. What was it a month there?

The Master: It was $100,000 or thereabouts for a year.

Mr. Ransom: $100,245.

The Witness: About $8,000 a month for those months.

Q. For January and February?

A. I will tell you for the record exactly what it was.

Q. Yes. And then after those two months, tell me what it was.

A. In our January accounts appears an item of $5,527.32, and in our February account $3,015.52.

Q. What was it for the next month?

A. No charge for the month of March; month of 17390
April $487.65; month of May $115.02; no charge for the month of June.

Q. Now, let us go back to January. The amount you gave, is that all of the charge for that expenditure?

A. That is the charge to which you have referred, a bill from the New York Edison Company.

Q. Well, what other?

A. In addition to that there were charges from our own pay roll, the pay roll labor at the different stations herein noted, aggregating four hundred and sixty odd dollars.

Q. Then it appears now that the company in Jan- 17391
uary, 1919, were carrying on an extraordinary expenditure?

Mr. Ransom: I object to the question. There is nothing to show that it is extraordinary under the conditions with which this company had to deal.

The Master: The record speaks for itself.

Q. The total for that entire month is five—

A. The total for the entire month is $6,002.03.

Q. And for February the total for the entire month is—

17392 Henry M. Brundage, Cross.

A. $3,413.73.

Q. And for March the total is?

A. $246.39.

Q. Well, before 1919 were you also carrying on a defensive emergency service which is in addition to what the Edison Company were doing for you?

A. Yes, there were charges on our own pay roll.

Q. Then what is the total for 1918 for everything, including what you handled and what the Edison Company handled for you? Can you give me that?

A. Yes.

17393 The Master: I thought you gave it before, the total?

The Witness: Yes, your Honor, over a hundred odd thousand dollars.

Q. Are you sure that there wasn't expenditures for that account in 1917?

A. I did not find any.

Q. That doesn't mean that there might not be some, does it?

A. If they were there I would probably find it.

Q. Did you have any special war insurance during 1917, 1918 and 1919?

A. Yes.

17394 Q. What account is that carried under?

A. That is all paid by the United States government.

Q. That was paid to you by the government?

A. It was paid by us and billed to the government and refunded to us.

Q. So there is nothing for that in your operating expenses for 1917, 1918 and 1919?

A. No, sir.

Q. Did you have any other expenditures for 1917, 1918 and 1919, like protection against poisonous gases, or in connection with poisonous gases for the government?

A. No, sir.

Q. You made no expenditure for that?

A. No, sir, none that I recall.

Q. Then there is nothing after this time that you have spent for protecting your own plant?

A. Insuring the continuity of the supply of gas, we included in that item the hundred thousand dollar item.

Q. Oh, then, there was some insurance. Was that paid back to you by the government for insuring the—

The Master: No, he means that this item— 17396

The Witness: The hundred thousand dollars was to protect our property and insure the continuity of our gas supply, and in addition to that we carried what we knew as war risk insurance.

Q. And that is all now?

A. Yes, and that second item was refunded to us by the United States government.

Q. And in this $100,000 expenditure for the year 1919, some of that was for insurance, you say?

Mr. Ransom: No. I object to the question.

The Master: He said it was to protect the property and insurance the continuity of supply. 17397
Contemplated in the protection of the property. That necessarily follows.

The Witness: Yes.

Q. Will you give us a list of the accounts to which charges have been made on an estimated basis, such as the renewal and contingency reserve?

Mr. Ransom: I object to the question as an inaccurate statement of what the renewal contingency reserve is, the two things are contradictory as stated in his question.

Mr. Chambers: It is not an inaccurate state-

ment, because it is a question. I am not testifying. It is an inquiry.

The Master: Well, the renewals and replacements, as I understand was a three per cent reserve.

Mr. Ransom: Against which charges are made.

The Master: For some prior years it was ten per cent.

Mr. Ransom: Under renewals and replacements?

17399 The Master: Contingency was ten per cent for a period of years.

The Witness: Ten cents, your Honor, per thousand.

Mr. Ransom: Ten cents per thousand sold.

The Master: Now there is a reserve set up for renewals and replacements at three cents?

The Witness: Per thousand.

The Master: And contingencies of five cents, is it?

Mr. Ransom: But not out of operating.

The Master: Well, I still don't quite understand your question.

17400 Mr. Ransom: The charges are against an account for which a reserve makes provision.

Mr. Chambers: We want to know what other accounts there are of that similar character where they made an estimate?

Mr. Ransom: I object to the question. All of these accounts are uniform system of accounts requirements, not this company's.

The Master: Well, do you understand the question I asked, Mr. Brundage? Are there any other accounts that are set up on an estimated basis?

The Witness: No. All the other accounts are actual liabilities represented by pay rolls.

The Master: Taxes are set up as estimated?

The Witness: No, sir; taxes are set up on actual bills rendered in every case.

Q. You said there were no other than renewal and contingency reserve treated in that way?

A. Yes.

By the Master:

Q. By "in that way" you mean on an estimated basis?

A. On an estimated basis.

Mr. Ransom: He has not said that renewal and contingency charges were set up on any other 17402
basis.

The Master: I have tried to make it clear that what he says now is that there isn't any account other than these, not necessarily admitting that these are, which are set up on an estimated basis.

Q. Now, I understand that renewals and replacements are on a fixed estimated basis of three cents.

Mr. Ransom: There is a sum of money set aside, but the charges are the actual charges.

The Master: Yes, but the reserve is an estimated reserve.

Mr. Ransom: The reserve is pursuant to a 17403
rule which is followed.

By Mr. Chambers:

Q. Now, look at this operating ledger for 1918, page 1081, which is in evidence. What do you mean when you carry this under the words "Accrued Taxes"?

A. I mean that we charge the account "taxes" and credit the account "accrued taxes," with a certain amount of money.

Q. Do you mean by that that in January you paid $145,326.52 worth of taxes?

A. I do not.

Mr. Ransom: I object to that, your Honor. It has all been gone into great detail.

The Master: Well, we will get a little more detail.

Mr. Ransom: Both by Mr. Teele and Mr. Brundage.

Q. What does that mean?

A. It means that that is the portion of the taxes for the year applicable to the month of January, 1918.

Q. Does it represent the amount that you actually
17405 had to pay out?

A. No, sir.

By the Master:

Q. How is that arrived at? Is that arrived at on the basis of the assessed value of the property times the rate for that year?

A. May I tell the tax story?

Q. Can't you answer that?

A. Yes, I can answer any reasonable question.

Q. Can you answer that question, in other words, if you find that your real estate is estimated at $10,000,000—

A. That is a matter of public record.

17406 Q. Your real estate is assessed at $10,000,000, and the books are closed before the 1st of January, and you find that the rate which has been fixed is two per cent, you know precisely what your land tax will be for the year 1919?

A. We do, to a penny.

Q. Do you set that up then one-twelfth each month?

A. We do not.

Q. State what you do do?

A. The company has a number of taxes. There is the real estate taxes, and the special franchise taxes, and the personal property taxes, and the federal income taxes, and the federal capital stock taxes—

The Master: And the State gross income tax?

The Witness: The gross earnings tax I call it. That includes not only a tax upon the gross earnings, but a tax on excess dividends. It is all put in one bill, and we call it the gross earnings tax. At the end of a year, for example the year 1917, at the end of that year we knew just what taxes were applicable to that year.

Q. For the year 1917 or 1918?

A. 1917. After the year had closed we know just what the taxes are.

Q. For that year? 17408

A. For that year, and we know just what our cubic feet of sales of gas were, and one divided by the other gives a certain number of cents per thousand cubic foot sold. Starting in the year 1918 we set up each month the same number of cents per thousand cubic feet based upon the sales in each month of the year 1918 that we knew had applied to the preceding year. We continue that until we begin to know accurately what the 1918 taxes are going to be. Now, we continue this rate per thousand during say six months of 1918, and by that time we know the real estate tax, both as to the assessed valuation, and the rate has been fixed, and we know how that is going to work 17409 out. A little later on in the year, after we have filed our reports with the Federal government for the capital stock tax, we know what that is going to be. Along in April or May—last year it was in June—we know what the Federal net income tax is going to be. As we determine through the circuit of the year, as the months roll by, what the taxes are going to be, we raise or lower our cents per thousand cubic feet. After October 31st, when the last report, that is the gross earnings tax, which is based on a nominal year ending October 31st, when that has been filed we

know, and it comes about the end of November, we know to a penny just what taxes are going to be applicable to that year, with the one exception of the Federal net income tax, which we will not know until the following spring. In November or December we adjust the entry to the end that as of December 31st, 1918, we have charged into our taxes the exact number of pennies for which a liability is shown on the books of the government, or the City or the State.

Q. Including the income tax?

A. Including the income tax, which is the only tax
17411 which is estimated. Every other tax is known to a penny.

Q. How can income tax be figured as an operating expense?

A. That is aside from the tax question which I was giving you. I want to make it perfectly clear to you just what we do.

Q. Now, you have told me the items that go into this charge. I want to know how you figure that income tax ought to go into that charge?

A. The net income tax?

Q. Yes.

A. What year will you consider?

17412 A. Say 1918.

Q. In the year 1918 the Federal statute required that a consolidated return should be filed. All companies that had a community of interests were required to file a consolidated return, and all of these affiliated companies prepared that—

Q. I know all about that. Having made a consolidated return, it is apportioned to the various companies?

A. Yes, sir.

Q. And part of it is apportioned to the Consolidated Gas Company?

A. Yes, sir.

Q. And that leads me to the conclusion that part of this entry includes an amount for income taxes?

A. Oh, no—

By Mr. Chambers:

Q. Is none of that for income taxes?

A. In addition to the particular account that he looked at and called my attention to, which was the operating taxes—

The Master: As I get the situation, Judge Ransom, the point is that the books set up an accrual as a bookkeeping item for Federal Income Taxes but that you do not make a claim that these 17414
income taxes are a proper charge against the cost of manufacturing and distributing gas?

Mr. Ransom: The Consolidated Gas Company has to provide and pay for that Federal income tax, but it is not included in the taxes that are on either Exhibit 205 or—

The Master: Either in 1918, or 1919, as a cost of production?

Mr. Ransom: It is not so charged.

Mr. O'Brien: Why have you left that out?

The Master: Do you want it in, Mr. O'Brien?

Mr. O'Brien: No, but I would like to know why he left that out. 17415

The Master: Because he probably thought that it did not belong in there. I don't think it belongs in there either; do you want to have it in?

Mr. O'Brien: You know, the Greeks bearing gifts.

The Master: Do you think they belong in?

Mr. Ransom: Of course, the real reason is there is no income from the gas business and so we cannot include it. It is a perfectly obvious reason.

The Master: Suppose there was an income

from the gas business, how could you charge that to the cost of production?

Mr. Ransom: That involves another question.

The Master: That is the question I am trying to discuss now. As these things come up I want them dicussed.

Mr. Ransom: But it is entirely nebulous and academic.

Mr. O'Brien: That is a good word "nebulous."

Mr. Ransom: There is no income from the gas business.

17417 The Master: In arriving at the amount of the Federal income tax, do you wish me to take that up with a finding?

Mr. Ransom: For the Federal income or State income tax?

The Master: Yes.

Mr. Ransom: No.

The Witness: He asked me about the operating taxes. There is no provision in there for the Federal income tax. We carry that in an account given to us by the Commission, non-operating revenue deductions. It is not in our books as operating taxes.

17418 By Mr. Chambers:

Q. What taxes do you include in this 1081?

Mr. Ransom: I think those are shown by the exhibits.

The Master: I think the books speak for themselves on that.

Mr. Chambers: It does not say taxes on operating; it just says "Taxes."

The Master: He has told us what they include. They include everything. They include land, franchise, gross earnings, Federal income, and all of the other things in this account that you have been looking at.

Mr. Ransom: The details on the Federal net income situation were brought out when Mr. Teele was on the stand and its status then was fully explained by Mr. Teele.

Q. Is the excess dividend tax in this on page 1081?

The Master: Yes, that is part of the gross earnings report, he says.

Mr. Ransom: The books show all the taxes that the Consolidated Gas Company has to pay.

Q. Did you treat that as an operating tax?

A. Yes.

Q. Excess dividends? 17420

A. The gross earnings and excess dividend tax are included there in operating taxes.

Q. You litigate some of these taxes, or you are litigating them right along?

A. Some of the special franchise taxes have been disputed.

Q. You do not pay them while they are in litigation?

A. We do not.

Q. Now, what do you do, then?

A. We have made payments on account of those years that are yet the subject of dispute.

Q. What do you do with the balance that remains due? 17421

A. It is carried as an accrued liability in the account Accrued Taxes.

Q. In this same account?

A. No, that is the operating account.

Q. Where is that carried—the taxes that you have not paid and that are in litigation?

A. It is in ledger A.

Mr. Ransom: This thing has all been covered once by Mr. Chamber.' questions, and the details of these books have all been brought out and are

on the record. I do not know whether he is using the same line of questions, but it has been identically covered.

The Witness: Is there a question?

Q. Yes.

A. What is the question?

Q. What do you do with the taxes that are not paid and are in litigation?

Mr. Ransom: I object to the question. The books speak for themselves. The records have been gone over once fully, and in addition the
17423 accounts of the Commission have been gone over fully as to these things.

The Master: I will allow it.

A. We credit to the account Accrued Taxes that counsel has before him, in the manner I have indicated, these taxes as they accrue month by month. As the taxes are paid they are charged on the debit side of that account Accrued Taxes, leaving a balance which represents those taxes that are still unpaid.

The Master: As an accrued liability?

The Witness: As an accrued liability, sir.

Q. Do you then correct the tax account in the operating schedule there in accordance with that situation?

17424 A. I do not follow your question, Counsellor.

Q. You carry those taxes which are not paid in this accrued account here?

A. We do.

Q. And you carry in this account over here (indicating) taxes which have been paid, you say?

A. I do not. I did not make any such statement. We charge to the operating account the taxes which have accrued and when we make the charge to the operating accounts we set up the liability in this account accrued taxes.

Q. What do you do with those taxes when you pay them?

A. We charge them. These represent payments for which vouchers have been submitted (indicating).

Q. Do you make any charge in the operating taxes?

A. Certainly not.

Q. Where do you get this on page 1081, this credit here of $64,081.12?

A. If you will turn to the Journal it will explain it in detail. I should say, looking at it now, that it was probably to correct an over-estimate during the preceding months.

Q. Was it?

The Master: That is the best he can testify to. 17426

Mr. Ransom: I object to this line of examination.

The Master: I sustain the objection.

Mr. Ransom: This has been testified to in this court room over and over again—a thing which the accountants and these public authorities have been doing for months, and it is a tremendous consumption of time.

Q. Are the materials of gas services charged to fixed capital account when purchased or when the service is laid in the books of the company?

A. Service material is capitalized as it is bought.

Q. What is the title of the account?

A. Services. 17427

Q. Do these charges include the entire net cost of materials delivered to the company?

A. Which charges?

Q. For gas services and material—include the entire net cost of the material delivered to the company?

A. They do.

Q. Is there sometimes a discount?

The Master: If there is, the net cost is charged is it not?

The Witness: No, sir.

17428 Henry M. Brundage, Cross.

The Master: What is it, the invoice?

The Witness: We charged the net cost of the material if a discount is obtained by a prompt payment of the bill in ten or twenty days, as the case may be. It is credited to discount account.

Q. Do you mean you carry it on a regular discount account?

A. Yes, sir.

Q. Is that an operating expense account?

A. No.

Q. Operating expense credit?

17429 A. No; it is carried as a clearing house account until the end of the year, because the credits that we obtain by this means represents material both for operating and construction, and at the end of the year the amount is cleared by credits for that portion applicable to material used in operating, to the operating expenses, but that portion applicable to material used in construction is credited to an account given us by the Commission.

The Master: But the proper proportion of the discount is allowed to the operating account?

The Witness: Yes, your Honor.

The Master: So the operating account is not

17430 charged with a greater expense of material than in fact it was called to pay?

The Witness: No, sir.

Q. Upon what basis are credits made to the stock accounts when materials are taken out for the laying of services?

A. I have just testified that the service material is charged directly to material account when purchased.

The Master: But what do you do when you take it out and use it? On what basis do you credit your account?

The Witness: We do not credit your Honor,

or charge it, because it has been credited to capital account already.

The Master: How about the stock account?

The Witness: There is no stock account with that class of material.

Q. What is done with expenses of the store room?

A. Why, we have no clearing house for the store room. The store rooms in our business consist of rooms at the fitting shops and pipe and special yards where large material is stored. There are two different and distinct departments. The expense of maintaining the shop store room is charged to operating 17432
expenses, the expense of maintaining what may be called the store room, but which is really a pipe yard, is charged to pipe and specials.

Q. How long have these practices been followed in regard to gas services?

A. Ever since I have been with the company.

Q. When a new service is laid, what charges are made to a capital account and what to operating expenses in regard to hauling from store room?

A. The material to lay the new service has already been capitalized when it was bought. In addition, when the service is laid there comes to us a charge from the pay roll for the cost of laying the service 17433
and from the cartage report for the cost of transportation of the material from the stock pile to the point of use.

Q. The five per cent you spoke of as to mains and overhead and other expenses, applied to services?

A. That is, if we laid any service for some other company?

Q. Yes.

A. It would; but as a matter of fact, we have not done it for years.

Q. What did you charge in for your overhead and general expenses for your own gas services?

A. Why, nothing.

Q. That practice has been followed a long time, I suppose, of charging nothing?

A. Yes, sir.

Q. Does the complainant company charge the consumer for any part of the cost of the service?

A. No, sir.

Q. Has it since 1906?

A. I believe not.

Q. That is, the company bears all the expense?

A. We lay the services free.

17435 Q. For laying the services?

A. Yes, sir.

Q. Now gas mains; to what account or accounts are the materials for mains charged when purchased?

A. Pipe and specials, stock account.

Q. Do the charges include the entire net cost of the materials delivered to the company?

A. They do.

Q. Now discount, handled the same way as in services?

A. Absolutely.

Q. And the store room expense, the same for gas mains as services?

17436 A. I did not say anything about the store room in respect of services.

Q. Well, the yards?

A. But the store room expense in connection with the pipe and specials at the yards is charged to the stock account, pipe and specials.

Q. And this practice in regard to gas mains has been going on for a long time, even since you have been with the company?

A. Sixteen years to my knowledge.

Q. In regard to laying mains, when charges are made to a capital account and operating expenses, are

they the same as in gas services, so far as hauling from store room and labor is concerned?

A. I cannot answer that question the way you ask it.

Q. Well, I asked you a moment ago in regard to services, what you did about hauling from store room, whether you made the charge to capital account or to operating expenses?

A. And I explained to you that any cartage in connection with the laying of services was charged to the service account. That same condition applies to mains, any transportation charges to get our pipe from 17438
the yard to the point where used, is charged to the street main account.

Q. Would that be charged to capital account or operating expense?

A. To capital account. You are talking about laying mains now.

Q. Now the labor?

A. Any labor employed is also charged to the mains.

Q. And that practice has been going on for a long time?

A. Yes, sir.

Q. Ever since you have been with the company? 17439

A. Many years.

Q. Gas meters; are they charged to fixed capital account when purchased, or when installed?

A. When purchased, capitalized at once.

Q. What is the title of the account?

A. Meters.

Q. Are discounts handled in the same way as to gas meters and meter installation as they are for services and mains?

A. If there were any discounts on meters, yes.

The Master: Are there any as a rule?

The Witness: No, sir, net price, no discount for prompt payment.

Q. What is done with the expenses of operating the store room for meters?

A. Why, there is no store room for meters except there is always some quantity of meters kept at each of the fittings shops and each of the five branches, and the cost of keeping them is simply one of the many duties that a shop clerk has to look after, and that shop clerk's time is charged to operating expenses.

Q. And any charge then goes under operating ex-
17441 penses?

A. Oh, yes. Meters are capitalized at their invoice cost, and that is all that goes into the account.

Q. Has that practice been followed a long time?

A. Years.

Q. Ever since you have been with the company?

A. Yes, sir.

Q. When a meter is first installed, what charges are made to the capital account and what to operating expenses, so far as hauling of meter to consumer's premises is concerned?

A. The cost of hauling the meter and the cost of setting it charged to operating expenses, setting meter.

17442 Q. Material and fittings for installation of meters?

A. Setting meters.

The Master: Operating expense?

The Witness: Operating expense account, your Honor.

Q. Swivels and cocks?

A. Capitalized when bought.

Q. Labor and installation?

A. I just testified as to that.

Q. Under settings?

A. Under setting.

Q. Any overhead and general expenses?

A. No, sir; direct cost of labor and material only.

Q. How long has that practice been going on?

A. Sixteen years at least.

Q. What is the approximate average weekly pay roll for the employees charged in operating expenses?

The Master: Objection sustained.

Mr. Chambers: On the ground that it is too much for him?

The Master: The books speak for themselves. I am not going to have him make those calculations.

Mr. Chambers: Mr. Maltbie tells me you can- 17444
not get it from the books.

The Master: I don't see how this witness can do it. If Mr. Maltbie can't.

Mr. Chambers: Well, maybe he cannot.

The Master: Well, I won't allow the question.

Mr. Ransom: I do not think your Honor's assumption in that respect is warranted.

Mr. Chambers: Exception.

Q. What is the approximate average monthly pay roll for the employees charged in operating expenses?

The Master: Same ruling.

Mr. Chambers: Exception.

Q. Does the company have continuous meter read- 17445
ings?

A. Yes, sir.

The Master: Sustained. Already answered. The witness has already answered it, but I will let the answer stand.

Q. Are bills sent out continuously, or only upon certain specified dates, in each month?

The Master: You may answer that, but it has been already answered.

The Witness: They are sent out daily.

Q. What period of time generally elapses between

the date when bills are sent out and the date of payment by private consumers?

The Master: Can you tell?

The Witness: The question is too—I cannot answer.

Q. Well, the best information you can give me?

The Master: Objection sustained. I will let you ask this one question, or I will ask it.

Generally speaking, throughout the Borough of Manhattan, are bills fairly promptly paid, or do you have a good deal of trouble collecting your

17447 bills?

The Witness: I am not prepared to answer that question, either, your Honor. I am not in close enough touch with the commercial department.

Q. Of course the quarter meters you get your money quicker than—

The Master: Objection sustained.

Q. How often do you go around and collect those quarter meters?

The Master: The prepaid meters, you mean?

Mr. Chambers: Yes.

A. Prepayment meter collections on the district

17448 every day.

Q. You mean you don't know how promptly the bills are paid for the gas?

The Master: Objection sustained.

Q. You do not collect from every meter every day, certainly, do you?

The Master: Objection sustained. The man goes around and is walking around every day.

Q. How large a territory does he cover, the man who goes around?

A. I cannot answer that question.

Q. How often does he get to a given meter?

A. I can't answer that question.

Q. Once a month?

A. At least.

Q. What period, generally, elapses between the date of the meter reading and the sending out of the bills?

A. Oh, it takes not more than three or four days for the bills on the district.

Q. Almost a cash—pretty near a cash basis, then, your selling of gas?

A. Oh, no.

Mr. Ransom: Objection. There is no foundation for such a statement, and I further call the attention of the Court to the fact that they have 17450
covered seriatim our various physical property accounts, and they are now taking up working capital.

The Master: I know what they are taking up, and I will let him do it.

Mr. Chambers: Ridiculous. Supposing we are.

The Master: Don't you suppose I know what these questions have reference to, Mr. Ransom?

Mr. Ransom: I thought you did.

The Master: Go ahead, Mr. Chambers.

Q. Does the company—

Mr. Chambers: Well, I want to ask— 17451

The Master: Well, if it is not practically a cash business, and the witness says no.

Q. Well, say a ten day credit basis, you get your money in about ten days on an average when the time is past?

A. I cannot say that.

Q. Why?

A. I can testify, as I have, that it takes about three days from the time the field check comes in until the bill goes out, but as to the time that elapses before it is paid, I cannot attempt to say.

17452 Henry M. Brundage, Cross.

The Master: I suppose there are some people who send you a check as soon as they get the bill?

The Witness: Yes.

The Master: And other people may hold it up until the middle of the month, when they pay other bills; and other people may wait till you send a collector around?

The Witness: Yes. These are people we have to send a collector after.

Q. You cut them off if they—

The Master: After two months you shut it off
17453 from them, don't you, if they don't pay?

The Witness: After they have had due notice.

Q. How long is the longest you let them go: is it two months?

A. I am not sure just what it is.

Q. You have a deposit all the while?

A. They have a deposit. But that is not true with every consumer. We have many thousands of consumers from whom we have no deposit.

Q. Does the company read any meters weekly?

A. Yes, we have weekly meters.

The Master: What kind of meters are those?

The Witness: Meters in location where the
17454 credit is very bad; fly-by-nights, cheap gin mills, and the like.

Q. How much do those bills average?

A. How much do they average in amount?

Q. Yes, and the average amount: what do those amount to weekly?

A. I could not say.

Q. Those fly-by-nights as you call them?

A. I could not say.

Q. Transients, do you mean?

A. I mean premises where the occupant has very little, and usually no credit whatever.

Q. What percentage of the gas sold by the company is sold through prepayment meters?

Mr. Ransom: That is fully shown by the exhibits in evidence.

The Master: I will let the witness answer.

Mr. Chambers: Which exhibit: Teele's?

Mr. Ransom: By Exhibit 205.

Mr. Chambers: He doesn't know anything about it.

Mr. Ransom: A mere matter of computation, which even your experts ought to be able to make. 17456

The Witness: Seventeen per cent and a fraction in the year 1918.

Q. Well, is that a fair average of other years?

A. Well, I could say as much.

The Master: Meters used very largely in these tenement houses, are they?

The Witness: Yes, sir.

Q. What period generally elapses between the delivery of oil and the payment of the bill?

Mr. Ransom: Delivery of the oil?

Mr. Chambers: Yes.

A. Under our contract with the oil company we are obligated— 17457

Q. I am not asking that. I am not asking anything about your oil contract. I want your actual experience in handling these oil bills.

A. Well, don't you see, your Honor, that the conditions are such that the period will vary more or less, and I will answer the question, if I may, in my own language. Under our contract all oil delivered during a current month must be paid for on or before the 15th of the succeeding month.

The Master: That is what you do?

17458 Henry M. Brundage, Cross.

The Witness: We actually do that.

The Master: Well, then, the answer would have been that "we pay for all oil delivered one month before the 15th of the following month."

The Witness: His question was, what is the average date?

Q. What period generally elapses; thirty days, is it?

The Master: Objection sustained.

Q. What period generally elapses between the delivery of the coal and payment of the bill?

17459 A. All coal delivered during the current month is paid for on or before the 20th of the following month.

Q. And when are the rentals paid for appliances leased and for what period?

A. When we rent an appliance we bill the consumer for one year from the date he signs the contract, no matter what time of the year it may be and when that year elapses we bill him from the date of the end of his first year around to April 1st of the succeeding year, and thereafter he is billed annually as of April 1st.

The Master: And he pays an annual charge?

17460 The Witness: He pays an annual charge.

Q. He pays in advance?

A. He pays in advance, pays one full year to start with.

The Master: Why do you run it to April? In order to get your accounts to April so far as possible?

The Witness: Because the rental for many years, long before I ever came with the company, was based on a nominal year of April 1st, and it is a slight advantage to us to keep it to April 1st as near as we can.

The Master: You try to get all your accounts to April 1st as near as you can?

The Witness: In respect to that rental, yes, sir.

The Master: Are you through, Mr. Chambers?

Mr. Chambers: There are a few questions that I want to ask him, but I am not ready with them. I will be prepared in the morning.

The Master: Are you ready, Mr. O'Brien?

Mr. O'Brien: I suggest that Mr. Chambers finish before I go on. 17462

The Master: No, I have got to put in all the time tonight that I can. I don't want to stay here tonight any more than the rest of you.

Mr. O'Brien: It is now 5:20. I have not made a request yet for an adjournment in this case and had it granted.

The Master: Well, I will try to help you out some day.

Mr. O'Brien: I want to have it noted, I say that with due respect to the Court, I felt very much embarrassed when I wanted to attend a funeral on Friday and you would not defer the visit to the Astoria plant. It has embarrassed 17463 me very much, because I had been invited or asked by the family of the deceased to act as a pallbearer, and it did not seem—

The Master: There was no necessity for your being there on Friday as long as the defendants were represented by one counsel.

Mr. O'Brien: You said you would not allow any of the experts to be present.

The Master: I said I would not permit the experts to accompany counsel, that it was purely

a matter with reference to a view of the plant by the Master, but that the Master would not go unless accompanied by counsel representing both sides. That was all. There was no necessity for experts accompanying us. Let us go ahead with this case, it has got to be finished.

CROSS-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Brundage, taking your occupation from day to day, will you give us some idea of just what you do? You have stated in a general way your position, but give me in detail just what your occupa-
17465 tion is, what it includes and what you do?

Mr. Ransom: Objected to as exhaustively covered.

The Master: I will allow that one question.

Mr. Ransom: Exception.

Mr. O'Brien: I may say at the outset to Judge Ransom that I am going to ask a great many questions that he may think may have been exhausted, but they are going into the record at least. I am going to find out how much this witness does for his salary, and what he knows about these books, and you might as well understand it now.

17466 The Master: Is it the purpose—

Mr. O'Brien: I am going to show that these books ought not to have been allowed in evidence, that the witness cannot swear that these books are correct, that he doesn't know.

The Master: If your examination has to do with an attack as to the reasonableness of his salary I will sustain it on this objection.

Mr. O'Brien: I am going to show that by reason of his daily work—I am going to show how much he really knows about the details of the

bookkeeping of this department, and that will include questions—his salary is only a minor matter.

The Master: Let me get this clear on the record, so we will not have any misunderstanding about it. The line of questions you are now proceeding with has reference to the admissibility of these books in evidence—is that correct?

Mr. O'Brien: Why, the whole examination of the witness goes to that.

The Master: That is what your question is now pointed at? 17468

Mr. O'Brien: Yes.

The Master: Objection sustained. I allowed the fullest cross-examination before the books were received, and I will not allow any more for that purpose.

Mr. O'Brien: Your Honor, we are now in general cross-examination, and a great many things—

The Master: You will have to keep away from the admissibility of the books.

Mr. O'Brien: If it follows now after a detailed examination of the witness as to various matters that do not explain themselves on 17469 their face, that the books are enigmatical and puzzling to the Court and do not clearly explain expenses, then of course your Honor may see fit to reverse your ruling.

The Master: I am not going to permit any cross-examination on that. Next question.

Q. Mr. Brundage, you are chief accountant at the present time?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. What is the daily routine of your occupation?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Does the daily routine of your occupation take you into the various books that have been marked in evidence?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. What tests, if any, have you applied to the
17471 so-called underlying data and books of original entry, to learn their accuracy?

Mr. Ransom: Objected to as fully covered.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. What did you refer to where you said page 1412, in answer to a question by Mr. Ransom as follows: "Q. Aside from the so-called general books of account that you have referred to are there further subsidiary memorandums or books? A. Yes, we keep several subsidiary records besides that." What did you refer to in that answer?

A. In order to have a complete set of books here
17472 I had in mind that there were in addition to these books which are books of account, of course, index books for all of the ledgers except the operating ledgers. The index of the operating ledger is contained therein. With the general ledger there is a general balance book, and with the operating ledger there is a monthly balance book, and a period or cumulative balance book; and with the sundry creditors ledger we keep a balance book; and with the sundry debtors ledger we keep a balance book, all of these balances being taken off monthly and checked with the controlling account in the general ledger.

17473

Q. And have these several balance books and period balance books which you have just referred to been offered in evidence?

A. No, sir.

Q. Have they been produced in court?

A. Not to my knowledge.

Q. Who has charge of them, the keeping of those books? Any particular employee or employees?

A. No, whoever runs the operating ledger, for instance, keeps the operating ledger balance book, and the same thing is true of each of the ledgers.

17474

Q. Does Mr. Viebrock work under you?

A. No, sir.

Q. Does Mr. Carter, Junior, work under you?

A. No, sir.

Q. Have they been assigned to you for accountancy work at any time during their employment in this company?

A. Yes, a great many years ago Mr. Viebrock was in my department, I should say somewhere about the year 1903 or 1904 for a year or two.

Q. But not since then?

A. Not since then.

Q. Is Mr. Davidson under you?

17475

A. Yes, sir.

Q. What is his title?

A. He has no title; he is one of my assistants.

Q. Is he assistant chief accountant?

A. I am not the chief accountant; I am the assistant secretary of the company.

Q. Who is the chief accountant?

A. We have no such officer.

Q. Who may be said to be the head of the accountancy department of this company?

A. I am.

17476 Henry M. Brundage, Cross.

Mr. Ransom: I object to that as fully covered.

Q. Has Mr. Davidson any official title?

A. No, sir.

Q. Is he assistant secretary?

A. No, sir.

Q. What is his salary?

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, I want to suggest that anything that is in these books relating to
17477 operating expense particularly, is before the Court and subject to cross-examination.

The Master: I do not think this is important enough to waste time on.

Mr. O'Brien: I have my own ideas and purposes in asking that question.

The Master: I will sustain the objection.

Mr. O'Brien: Exception.

Q. Was Mr. Davidson paid a salary by the company during the year 1918?

Mr. Ransom: I object to that as immaterial.

The Master: I will allow it.

A. He was not.

17478 Q. For any part of that year?

A. Not by the Consolidated Gas Company.

Q. Did he work for the Consolidated Gas Company during the year 1918?

A. No. I took him over as of January 1, 1919.

Q. And has he been on the pay roll since that time?

A. Yes, sir, he has been paid by the Consolidated Gas Company since January 1, 1919.

Q. And continuously from January 1, 1919?

A. Yes, sir, right up to the end of September.

Q. And prior to January 1, 1919, what pay roll was he on?

A. He was an employee of the Standard Gas Light Company.

Q. Was there any deduction made from his salary during the year 1919 for the time that he spent away from the company's work with the Kings County Lighting Company?

A. In 1919?

Q. Yes, sir.

A. I should say that he has been with me practically every day in 1919.

Q. You should say that?

A. Yes; I do not recall that he was away. 17480

Q. Where is his pay roll kept, or time book that would cover his time?

A. In the treasurer's department.

Q. Is there a pay roll kept there?

A. Why, certainly.

Q. Or is he paid by check?

A. He is on the monthly pay roll.

Q. What particular pay roll would that be?

A. On the monthly pay roll.

Q. Is that under you?

A. No, sir.

Q. How is it that he is on the treasurer's pay roll and not on your pay roll? 17481

A. I have already testified that there is one monthly pay roll and all these men that are paid on a monthly basis, regardless of the department they are assigned to, are paid by check.

Q. Do you vise that pay roll before payments are made?

A. I do not.

Q. What official or what employee of the company makes up that pay roll, checks it up and O K's it, and on whose O K are the payments made?

17482 Henry M. Brundage, Cross.

A. The monthly pay roll is made up in the treasurer's department and audited by the auditor and then paid by check.

Q. By whom in the treasurer's department is it made up?

A. I cannot say.

Q. You do not know?

A. No, sir.

Q. Haven't you charge of all the accountancy work of the complainant company?

A. I have not charge of the treasurer's department,
17483 nor any of his subordinates.

Q. Then there are accountants in the treasurer's department that are not under you?

A. I shouldn't say so.

Q. What is that?

A. I should not say so.

Q. Wouldn't you call the making up of a pay roll an accountancy matter?

A. I would not.

Q. Would you exclude that pay roll from accountancy work?

A. We call our accounting department the men that keep the books of account, and it doesn't take
17484 an expert—

Q. I asked you a question, Mr. Brundage. Give me an answer?

Mr. Ransom: I object to that.

The Master: Objection sustained.

Mr. O'Brien: I repeat my question and press it.

The Master: The objection is sustained.

Mr. O'Brien: Exception.

Q. Is Mr. Davidson working under your direction all the time?

A. He is.

Q. And he takes orders only from you?

A. Well, I can imagine that perchance. Some of the vice presidents might give him an order and he would take it.

Q. They can supersede your orders at any time?

A. Absolutely.

Q. And they do?

A. Presumably.

Q. Why do you say presumably when you are talking about a fact?

Mr. Ransom: Objected to.

The Master: Objection sustained. 17486

Mr. O'Brien: Exception.

Mr. O'Brien: Your Honor, I think the witness ought to be required to give me a definite answer.

The Master: Let us get to something more important than Davidson.

Mr. O'Brien: I submit that I am the best judge of what is important on my particular branch of this case.

The Master: You may think it is important and I may not, and my judgment will control yours.

Mr. O'Brien: You have the last say. 17487

The Master: I do not think Mr. Davidson is very important here except that he sees that these books are here every day.

Mr. O'Brien: He will be of some importance before we get through with the case.

The Master: Next question.

Q. Mr. Brundage, did you keep tabs on his time during the time that he has been in the employ of the company, or has anybody?

Mr. Ransom: I object to that.

17488 Henry M. Brundage, Cross.

The Master: I have had enough of Mr. Davidson, as I said. Objection sustained.

Mr. O'Brien: Exception.

Q. Why do you say that he has not been absent from the company's works during any part of the year 1919?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Was any deduction made from his salary during the current year for absence on work for any other company or person?

17489 Mr. Ransom: I object to that.

The Master: Objection sustained.

Mr. O'Brien: It strikes me, your Honor, that this is perfectly proper. The operating expenses of this company are made up of small amounts of money. The witness sneered at $14,000 a little while ago—

The Master: Well, I sneer at Davidson. I rule that in the light of the issues involved here, I am not going to sit here and spend an hour or a minute on Mr. Davidson's salary, or what he does.

17490 Mr. O'Brien: I want to bring out the fact that this man, who is working for this company, was busied about the trial of the Kings County Lighting Company case, and during the present year.

The Master: I refuse to let you do that.

Mr. O'Brien: And that in the Kings County Lighting Company expenses of last year were payments made to him.

The Master: I refuse to let you prove it, because it is too unimportant.

Q. Is there a department under your charge, or is

there a branch of the accountancy department, that has to do particularly with pay rolls?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Is there a chief in charge of that particular work?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Did you create and devise the system of book-keeping that is now being used by the complainant? 17492

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Did anybody else share with you in the work of devising the present system of keeping accounts in the complainant company?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. You have spoken on page 1414 in the record, in your direct testimony, of a so-called consumption book. Will you tell in detail what that book is?

The Master: Let me see that testimony (taking volume of record). Objection sustained. 17493

Mr. O'Brien: I want to go into this.

The Master: The witness at that very page described in detail what that consumption book showed.

Mr. O'Brien: He has not described it in detail, and I want to see what the book contains. They have in this the amount of gas alleged to be consumed, alleged to be sold. The methods by which those accounts are kept, the witness's

17494 Henry M. Brundage, Cross.

knowledge of them, the question as to who can come on the stand here and swear to a statement made as to a given year, say 1918, or to a certain number of cubic feet of gas sold, and that that represents all that was sold, is very important in this case. He has testified on page 1414 that there is a consumption book so prepared as to have the number of the account corresponding with the number of the account in the ledger, down the left side of this consumption book, and he enters opposite each account the
17495 number of feet of gas consumed, as shown by the bill. Presumably those are monthly bills, and I want to inquire of the witness as to just who in the several stations have charge of those books —who had charge of them in 1918, the crucial year in this case, and in that way bring out the facility with which the complainant could come in here and offer the Court some evidence on which the Court might possibly base a decision on the amount of gas consumed.

The Master: The objection is sustained.

Mr. O'Brien: Exception.

Q. In the several branch offices of the complain-
17496 ant company during the year 1918, who had charge of the consumption books?

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Brundage, what constitutes the entry in the general books of a month's sales of gas?

A. The monthly entry in the books of account?

The Master: You may answer that.

Q. I said general books, Mr. Brundage.

A. The general books of account?

Q. Yes.

A. I am referring to the general books of account. The monthly entry in these general books of account represents the indexed quantity of gas sold during the month and the amount of money at eighty cents per thousand for gas sold to general consumers, and seventy five cents a thousand for gas sold to the city.

Q. Over what period of the month referred to in the general books of account are the sales computed?

A. Ask that question again, Counsellor.

By the Master:

Q. How can you tell how much gas was sold during any calendar month? 17498

A. It is the amount of gas which was indexed and recorded in the consumers' ledgers during that month.

Q. Which might overlap that calendar month, though?

A. It does.

Q. That is what Mr. O'Brien was trying to get at.

A. He probably wants to get what we know as the average index date, your Honor.

By Mr. O'Brien:

Q. I am asking you questions which are simple ones.

A. No, it is not a simple question. It is a very 17499
difficult question the way you ask it.

Q. What?

A. It is very difficult to answer the way you ask it. What we know in the gas business as the average index runs from about the 15th or 16th of each month to the 15th or 16th of the succeeding month.

Q. If you have an entry in any one of your general books of account to the effect that the gas sold, the gas sales, amounts to a certain amount during a calendar month, on what is that predicated?

A. Upon reports—

17500 Henry M. Brundage, Cross.

Q. Does it mean the same days of that calendar month?

A. No, it does not.

The Master: I though he had answered it before, but I will let him answer it again.

The Witness: I thought I had answered it, your Honor, in explaining what we know as the average index date.

By the Master:

Q. Give it again. Mr. O'Brien's question, as I understand it is this: Your books will show for a
17501 calendar month from the first of the month to the 30th or 31st, that you sold 10,000,000 of gas. That is a small amount, I know, but does that mean that between those dates you actually sold and delivered ten million feet of gas to your customers?

A. No, sir.

Q. Does it mean that between those two dates you actually read meters of so much gas to your customers?

A. It does.

Q. So that when you sold that much gas during the month, that is not an entirely accurate statement?

17502 A. No, it does not refer to the actual sales during the month, because we cannot index all our meters on the 31st day of the month; we are indexing them every day.

The Master: I think it is perfectly clear about that.

By Mr. O'Brien:

Q. Take the month of January, 1918, the sales recorded in your general books of account for that month represent in fact what particular dates?

The Master: Do not take that month at all. That month is covered with every other month

Objection sustained. It is perfectly clear on the record, Mr. O'Brien, what monthly sales means.

Mr. O'Brien: I will note an exception, your Honor, and ask another question. It is not perfectly clear to me, and not clear on the record, in my opinion; but I say that with due respect to your Honor's keen grasp of the witness's answer. I will take any other month.

The Master: Do not let us take any month.

Mr. O'Brien: And ask him what days we may say that comprehends.

The Master: Objection sustained. 17504

Mr. O'Brien: Exception.

Q. If you have an entry giving a certain number of sales for June, 1918, are we to assume from your answer that that number of sales is not the actual number for the calendar month of June, but that they represent the total readings of indices of the consumers of the days from the 15th of May to the 15th of June?

Mr. Ransom: Objected to.

The Master: No, that is not so at all. It means the readings during that calendar month. The witness says it represents readings during that calendar month. 17505

Mr. O'Brien: He did not say that, your Honor.

The Master: But he has said it. He said it a dozen times.

Mr. O'Brien: He said they had in the business an averaging.

The Master: I am sorry if you do not get it. Objection sustained. What he says in explanation of that method of computation that if you take the bills rendered, the meter readings for

a calendar month, it will show practically the actual gas sold and sent out to customers and used by them from the 15th of one month to the 15th of another. That is what he says.

Q. Do you average up every month of the year?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you read the indices on the 15th of each month?

The Master: Objection sustained. Mr.
17507 O'Brien, I know your point perfectly well. I can see where for the month of January in any one year you are lapping into the preceding December, and for the month of December in any one year you are lapping over into the following January. If there is any point to that for argument, it is perfectly clear on the record. Do not let us waste any more time on that.

Mr. O'Brien: I want to get into that, your Honor. Thereby hangs a tale.

The Master: Let us have the tale then.

Mr. O'Brien: That is true of every one of these items. It is a matter for camouflage in this
17508 case.

The Master: How late do you want to stay here?

Mr. O'Brien: I will stay as long as your Honor wants to stay.

The Master: Go on and ask your next question.

Mr. O'Brien: Mr. Brundage is not going to be through with me in an hour, you know?

The Master: What is the use arguing a question that is not at issue?

Mr. O'Brien: I respectfully submit I should be allowed to make my record.

The Master: Make it by asking questions.

Mr. O'Brien: I know how this witness explains these things. Maybe he will change his mind. He has changed it before.

Q. Is there any other system used, or has it been used by the company, of checking up the accuracy of readers' work in the matter of reading consumers' meters, than by shifting the men in their territory from time to time?

A. The main reliance we have is by that very system, Counselor, to have the indexers shifted.

The Master: You have not any other system of checking?

The Witness: The accuracy of the meters, did he ask me?

The Master: Yes.

The Witness: The accuracy of the meters?

Mr. Ransom: What was the question?

The Witness: Of course, if the indexes were to be erroneously read an erroneous bill would follow, and we would know it through the bookkeeping department as well as by the shifting of the indexes.

The Master: I think we have had that before. Have we not been all over that?

Mr. Ransom: Yes.

The Master: I am very sure that whole line was covered once before.

The Witness: It was, your Honor. I covered that.

Mr. O'Brien: The whole trouble with the examination of these witnesses, your Honor, preliminary to making an objection, or as to their

qualifications, is that you have been told "wait until cross-examination, this is only for a limited purpose now." Now we have him here on the table.

The Master: With reference to these books of accounts of the gas company, I allowed the fullest preliminary cross-examination because I had hoped that in that way I would limit a general cross thereafter. I hoped I would accomplish that result. There was not any talk at that time about reserving anything for a general cross.

17513 Mr. O'Brien: Your Honor will recall you did not allow me to cross-examine Mr. Teele at all as to preliminary after receiving his exhibits.

The Master: Yes, because I made up my mind I was not saving any time by the preliminary cross, and I made up my mind when I got to Mr Teele I was going to force you into a general cross-examination rather than a preliminary; but as to this witness, this matter was entirely covered and I will not allow any more.

Q. You meant by the last answer, did you, Mr Brundage, that if there was a complaint made over a bill being large or exorbitant that would lead to an

17514 inquiry that would disclose the error, if there was an error in the reading?

Mr. Ransom: Objected to.

The Master: Objection sustained on the ground it has already been fully covered.

Q. Is there any gas supplied so far as you know by the complainant company that is not metered?

The Master: Objection sustained.

Q. Are there any gratuitous accounts on the books of the company for which no money is really received for the gas furnished?

A. None whatever.

17515

Q. Is the matter of requiring a deposit on an account from the consumer who seeks to open an account discretionary with the superintendents of the several commercial offices?

A. I can hardly say it is discretionary. The company has a very well established policy in that respect, namely, that we desire to keep the amount of consumers' deposits down. We are making a continuous effort to refund deposits when a consumer establishes his credit.

The Master: Until a consumer has established a credit you ask a deposit?

17516

The Witness: We do.

The Master: That is a fixed rule?

The Witness: Except to a property owner or when we have reason to believe that his credit is good.

The Master: To that extent the commercial branch manager or superintendent has to use some discretion?

The Witness: Naturally, your Honor.

Q. Do you mean to say that the company voluntarily from time to time returns to the consumers their deposits?

The Master: That is what he said.

17517

The Witness: I do, very positively, sir.

Q. What books of account would reflect those payments?

A. The consumers' deposit account will show you the amount received and the amount returned. You will find it right in the general ledger, operating ledger.

Q. And the consumers' deposit books in the branch offices would have the details of those payments?

A. They would, sir.

17518 Henry M. Brundage, Cross.

Q. Well, is there any official or employee in the branch offices who have the particular work of inspecting the reports of the meter readers?

A. Why, they pass through the regular routine of the branch offices, which requires that they be vised by the bookkeeper and by the particular clerk and chief clerk, and the superintendent occasionally sees them. There is a regular routine in that respect, the exact step I cannot tell you in the exact language.

Q. Well, is there anybody charged particularly with the duty of searching our irregularities in the read-

17519 ing of the meters?

A. Yes.

Mr. Ransom: Objection.

The Master: Objection sustained.

Mr. O'Brien: The witness answered yes.

The Master: Well, I will let the answer stand. The record will show.

Q. Who is that man in each station?

Mr. Ransom: Objection.

The Master: Objection sustained.

Q. What is the name of the individual in each station?

Mr. Ransom: Objection.

17520 The Master: Objection sustained.

Q. What is his title?

The Master: Objection sustained.

Q. Mr. Brundage, are there any bills that are sent out by the complainant company for gas furnished estimated?

A. Yes.

Q. In what instances and where?

A. That occasionally happens.

Q. On what occasions?

The Master: How does it happen?

The Witness: It would happen where we had a meter that did not register and an estimate would be prepared where it was found that the meter was not registering, they would prepare an estimate.

The Master: In other words, if you take a taxicab and go uptown and find the meter has not registered you pay the man according to the distance?

The Witness: He will estimate the distance he has covered, your Honor, and render you a bill. 17522

The Master: And if a family or a concern has been using gas and you know their average consumption, you do the best you can if the meter breaks down and figure out how much it was?

The Witness: Yes, sir.

Adjourned to Thursday, November 6, 1919, at 9:15 A. M.

Last Complainant's Exhibit 361.
Last Defendants' Exhibit NN.

17523

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 17527

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, November 6, 1919.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 17528
MR. O'BRIEN, of Counsel for defendant Swann.

HENRY M. BRUNDAGE, resumes the stand.

CROSS-EXAMINATION CONTINUED BY MR. O'BRIEN:

Q. The treasurer's book, Mr. Brundage, have you it here?

A. For what year, Mr. O'Brien?

Q. Well, the last one covers three or four years? 17529

A. I believe it is here.

Q. This matter of making estimates of the consumption of gas of a given consumer, is that left to the discretion of the meter reader?

A. No, sir.

Q. How is it handled?

A. That is handled by the superintendent of the branch office.

Q. Has he written rules to govern his conduct in such matters?

A. He knows the general policy—

The Master: Has he written rules?

The Witness: No, not so far as I know.

Q. Are there any standing oral instructions that regulate his conduct in such matters?

A. Yes, sir.

Q. Who gives them to him?

A. They come to him from the general superintendent of the commercial department who in turn gets them from the executive officer of the company.

Q. Then there isn't anything written, it is passed along the line orally?

17531 A. Yes.

Q. If there is a standing rule covering such matters, state what that rule or instruction is?

A. There is a standing rule, Counsellor, that when it becomes necessary to estimate a consumer's bill that the local superintendent shall pass upon the matter and endeavor to adjust the bill to the satisfaction of the consumer; in fact the company leans backwards in order to satisfy the consumer, if possible.

Mr. O'Brien: I move to strike out the last sentence of the witness's statement.

The Master: Motion denied. I take it that is an instruction to the superintendent.

17532 Mr. O'Brien: The record does not have it that way.

The Master: That is the way I understand the witness's statement.

Mr. O'Brien: I know, but Mr. Brundage's whole testimony—

The Master: Is that an instruction, to lean backwards?

The Witness: It is, to do everything possible to satisfy the consumer.

Q. It is not put on paper, is it, Brundage?

A. Is it necessary for you to speak to me in that manner?

Q. Yes. Now, you learn to keep your place while you are under examination by me.

The Master: Sit down, Mr. Brundage.

Mr. O'Brien: I think the witness ought to be instructed—

The Master: Mr. O'Brien, I have told you several times that you cannot scold witnesses.

Mr. O'Brien: Your Honor, I have appealed to you to direct this witness to give me an answer and I appeal to you again to give me an answer, and not to make comments on the testimony. The whole record of his direct and 17534
cross-examination is made up of voluntary conclusions and statements that he is not entitled to draw from the questions put to him.

The Master: I will not make the direction, because I do not think you asked him a proper or gentlemanly question.

Mr. O'Brien: Your Honor then refuses to strike out the words that they lean backwards?

The Master: I certainly do. The witness has answered a question put to him by the Master that that is the instruction to the superintendents to lean backwards.

Q. Did anybody in your hearing ever give such 17535
an instruction to the superintendent of a commercial office?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Was such an instruction ever given to you to be communicated by you to the head of a commercial branch office?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Are there any regulations that indicate to the superintendent of a commercial office when he is to take it up with the main office?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Well, your Honor—

The Master: I have ruled, Mr. O'Brien, that the matter has been sufficiently covered. I do that because of the witness's statement that estimated bills are only sent when meters break down, and that must be a very small percentage

17537 of the charges.

Mr. O'Brien: There isn't anything in this record yet that indicates how small it is.

The Master: I assume it is. How small is it, Mr. Brundage, the occasions when an estimated bill is sent?

The Witness: They are comparatively infrequent, your Honor; I cannot give you any exact percentage.

The Master: Well, rather rare?

The Witness: Rather rare cases.

The Master: I will not permit any more on that; it is not worth while.

17538 Q. Now, what do you base the statement on that these occasions are rather rare?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. On what facts do you base a statement that the occasions of meters getting out of order or breaking down are rare?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception. Your Honor, this is an important matter.

The Master: I don't think so.

Mr. O'Brien: I think the witness is in error. A large percentage of the bills monthly, or meters monthly, get out of order, it runs into a large amount of money, and I insist that I have a right to go into this question.

The Master: I think you have gone into it now. If the records show anywhere, as they must, that the amount is estimated, it is easily argued from the record itself. I shall ask the witness—when a bill is estimated, does it appear upon the consumption book as an estimated 17540 amount?

The Witness: No, the consumption book would show the amount for which the consumer was billed, but the branch office records would show that the bill has been estimated.

The Master: Does not the record show the meter readings at the beginning and end of the month?

The Witness: The consumption book?

The Master: Yes.

The Witness: No, the consumption book shows the amount of the consumption.

The Master: What book shows the meter read- 17541 ings?

The Witness: The consumers' ledger.

The Master: Well, the consumers' ledger would show that a meter reading is an estimated amount?

The Witness: Yes, sir.

Q. Is the word "estimated" put upon the bill to the consumer?

A. Yes, sir.

The Master: If it is an estimated amount the bill shows it?

The Witness: Yes, sir.

Q. Is there a regulation that the bills must be marked that way?

A. Yes.

Q. Did you ever see a bill going out to a consumer marked "Estimated"?

A. Not that I recall.

Q. What is done when the index reader finds the premises locked when he goes to read a meter?

A. He is unable to get the index, of course, on that route, and that reading is taken at a subsequent date,
17543 and is what we call a skipped index. That is the skips where the original indexer is unable to get the index.

The Master: You send another man out, do you?

The Witness: Yes, sir.

Q. Have you any records that show the number of skippings each month?

A. I believe there is, Counselor, kept in the commercial department.

Q. Is it a separate record?

A. It would be in the nature of a statistical record, I should say, because of the fact that the indexes
17544 of a given address are taken on or about the same day each month, and when it was taken, whether it was on the regular day or at some date three or four days subsequently, the ledger would not show it, but I believe the Commercial office keeps a record of those skipped items.

Q. Are you able to say what percentage of skippings there are in any territory within a given time?

A. I am not.

Q. Is there anybody in the main office charged with the duty of going into this question, a general inspector?

A. Of the skipped indexes?

17545

Q. Yes, and the other work done by the meter readers?

A. Why, we have a general superintendent of all the commercial department.

Q. Is there anybody under him who is sent around to check up these meters and find out just what percentage of meters are not actually read but are estimated?

A. There is an assistant general superintendent, and both the superintendent and the assistant superintendent are going around the district continuously.

17546

Q. Is there anybody else who might be charged with the obligation of going into these particular matters, the reading of meters, the skipping of meters, and the difficulties that give rise to the estimating of amounts consumed?

Mr. Ransom: I object to that.

The Master: I will allow it.

Mr. O'Brien: Who might be?

The Master: Yes.

Q. Well, who are, to get into a direct, positive mood?

A. The general superintendent and the assistant general superintendent have entire jurisdiction over this entire commercial department, Mr. O'Brien.

17547

Mr. O'Brien: I ask for an answer.

The Master: Anybody else?

A. No one other than that the executive officers of the company are in turn the superiors of the general superintendent and his assistants.

Q. Is there any individual other than the general superintendent and his assistants who does work in connection with the branch offices of an inspectorial character?

A. Not at the general office.

Q. Is there any inspector of the readers of meters

who goes over and surveys their work and finds out whether they are omitting to read indices?

A. The superintendent of each branch office does that work.

Q. Are you sufficiently acquainted with the subject to be able to say, or even to approximate, the number of readings that a given index reader will read in a day?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, these things are

17549 important.

The Master: I do not think so. Mr. Edgerton may think they are important.

Mr. O'Brien: Mr. O'Brien thinks so, your Honor.

The Master: Then I disagree with Mr. O'Brien.

Mr. O'Brien: I disagree with your Honor in that regard. This question here—we might as well understand one another—of the amount of gas that is sold and the amount of gas manufactured, we are not going to take for granted from the books that are put in.

17550 The Master: Neither am I.

Mr. O'Brien: Nor from figures put in.

The Master: Neither am I.

Mr. O'Brien: There has been no proof made of it, your Honor.

The Master: I know this, that you have made a point with reference to the accuracy of the statement that so much gas is sold per month, in several directions: First, you say the meters are not read for the calendar months and the amounts stated to have been sold during a particular year are inaccurate because the previous

and the subsequent year overlap; you say there are meters that break down, you say that meters skip and sometimes are not correct. I have all of those things in mind. You do not have to waste any more time on that. You have made your point. When I come to analyze the books of account I have those things in mind. I also have in mind what Mr. Chambers said yesterday, that in figuring the cost of operation $100,000 was spent especially for guarding the plants last year. I have all those things in mind. I have them in mind as compared with what I think to 17552
be the amount of labor and material that goes into the manufacture of the merchandise. If I can arrive at a figure, having in mind the actual operating results as compared with the amount of oil, coal and other things that go into the manufacture, I have everything in mind. But you have made your point; that is what I am trying to make clear to you.

Mr. O'Brien: I am trying to bring out to your Honor the ease with which they could cover this proof up to date.

The Master: I have that also in mind.

Mr O'Brien: Also we have not before us here 17553
an opportunity to cross-examine the man who might have some knowledge of it.

The Master: I have that in mind.

Mr. O'Brien: Just as soon as I reach some delicate subject it is outside of the particular domain of the witness.

The Master: I have all those things in mind.

Mr. O'Brien: Take the subject of the skipping of meters, from your own experience, go into any apartment house in the city and endeavor, say, where there are seventy families—

The Master: I do not have to go into an apartment house. When I leave my house down at the shore in the fall I usually get the gas company to come down and read the meter. I did this year. The man did not show up and they will not get into that house until next spring. They will not read it until next May.

Mr. O'Brien: Take any multiple dwelling, where there are seventy families and they have maids at home, you cannot get into those houses.

The Master: Then they do it the next day.

17555 Mr. O'Brien: You cannot get into fifty per cent of the houses from nine o'clock in the morning to six at night, to read the meters.

The Master: Well, they do it.

Mr. O'Brien: There is a lot of that is estimated.

The Master: I assume there is.

Mr. O'Brien: I do not know whether the witness covered that directly.

Q. Do you know, Mr. Brundage, and have you ever seen any records that would indicate the percentage of estimates made of consumption?

Mr. Ransom: Objected to.

17556 The Master: That has been answered. Objection sustained. He said it was very infrequent and rather rare.

Q. Would you be surprised if it was three per cent?

Mr. Ransom: Objected to.

The Master: Objection sustained as to whether he would be surprised or not. If the fact is it is three per cent, it is easily proved.

Mr. O'Brien: Is your Honor inclined to allow me to ask the witness on what he bases the statement that it is very rare?

The Master: Yes, but I say the subject is sufficiently covered.

Mr. O'Brien: I note an exception.

The Master: It is perfectly easy for your engineer to show that it was not rare, that the books show it was a frequent thing.

Mr. O'Brien: I am trying this case on the assumption that the burden is upon the complainant, that we do not have to put in any proof; we do not have to hire any statisticians. The defendants do not have to spend any money here.

The Master: But this witness has testified to the fact.

Mr. O'Brien: Not yet, on that point. When 17558
I tried to bring out the point your Honor held it was sufficiently covered.

The Master: Yes.

Mr. O'Brien: Now, he has made a statement here that it was rare and I am asking him how rare it was.

The Master: I will let you ask that. On what do you base the statement that it is infrequent and rare?

The Witness: On my knowledge of the branch office practice and the statements made to me by the general superintendent of the commercial department. 17559

The Master: You get no further with it. I assumed that was the explanation.

Q. Can you give any more definite statement?

The Master: Sustained.

Mr. O'Brien: Exception.

Q. Do the managers ask of the commercial offices to turn in from month to month a detailed statement of the estimated amounts?

Mr. Ransom: Objected to.

The Master: Sustained.

Mr. O'Brien: Exception.

Q. What steps are taken by the company to check up the judgment of the managers of the commercial offices in the matter of estimated bills?

Mr. Ransom: Objected to.

The Master: Sustained. You want to have this in mind, Mr. O'Brien: This company is not in the business of giving away gas; they are in the business of selling gas, and in the operation of that business I am not going to assume they have in mind only the making of a case that might get them a little higher rate. I am go-
17561 ing to assume this company operates its business as a business enterprise, collecting all the money it can and charging for all the gas it possibly can charge for, and that it takes every precaution to collect every dollar it can get. What is the use of wasting this time?

Mr. O'Brien: Of course, if you take that as a presumption it will be futile to ask this witness questions. If you are acting on the presumption that this company cannot be run slipshod, that it will not be extravagant, that it will not pile up expenses in 1918 in order to meet a rate case, then it is futile for me to go ahead with
17562 this cross-examination.

The Master: I am telling you now there is not any sense of you wasting a lot of time on a lot of questions when you have made a point, because you will have a good deal of difficulty making any impression on my mind that for a period of ten or fifteen or twenty years this company has been operating its business in a manner to throw away money and not to use every precaution it could to collect its money.

Mr. O'Brien: I am asking the witness about the year 1918, your Honor.

The Master: Yes, and the questions have covered an indefinite period. Has the practice been changed with reference to skipping meters or estimated bills in 1918?

The Witness: It has been the same for all the years I have been with the company, your Honor.

The Master: Objection sustained.

Q. What is done where the meter stops going?

Mr. Ransom: Objected to.

The Master: Sustained. It has been answered. The witness has said that if the meter does not 17564
register they have to estimate it.

Q. What is done then, Mr. Brundage?

Mr. Ransom: Objected to.

The Master: Sustained.

Q. How is a new meter adjusted that is put in after one is taken out and which has stopped indicating the consumption?

The Master: What do you mean—what does the new meter start with?

Mr. O'Brien: Yes, I want to know the process and the way that whole subject is started, your Honor.

The Master: What do you start them at? 17565

The Witness: All meters are set in the district at zero, always.

The Master: So that if my meter breaks down and fails to register and you take out the meter and put in a new one, then the new one goes in at zero?

The Witness: Yes, sir.

Q. When meters stop as a rule they do not stop suddenly, do they?

A. Well, that is a mechanical question, your Honor, and I would not attempt to answer it.

Q. Is it not a fact within your knowledge that they slow down?

A. Yes, we do know that meters do run slow.

Q. What do you do then with a bill after it is found that they have run slow and then finally stop; what do you do with the consumer's bill then to compensate the company for the loss in previous months?

A. We endeavor to adjust the account with the consumer by rendering an estimated bill for any short consumption.

Q. In other words you take care of the company's
17567 interests by balancing the bill at the time the discovery is made?

A. We endeavor to do that, sir.

Q. And in such cases is the bill marked "estimated"?

A. I should say yes.

Q. But you do not recall in that case either seeing a bill marked "estimated"?

A. I have not seen such a bill.

The Master: Well, you do not see the bills?

The Witness: I do not see the bills ever, your Honor. They pass through the commercial department.

17568 Q. Have you ever made an inspection yourself of consumption records?

A. Yes.

Q. Do you do that periodically, or was it merely haphazard?

A. Oh, at odd times I have had occasion to go through the commercial departments.

Q. Does the general superintendent of commercial offices make it his business to inspect consumption records?

A. Yes, sir; he and his assistant are on the district continuously doing that very thing, checking up all this branch office work.

17569

Q. Have he and his assistant been in the employ of the complainant for a number of years?

A. The general superintendent has been with the company I should say over twenty-five years and the assistant superintendent—oh, fifteen or sixteen years.

Q. Who are they?

A. William Barnitz is the general superintendent and Mr. Reinach is the assistant general superintendent, both old employees.

Q. How long does it take a new employee to familiarize himself with the reading of meters?

A. I am not prepared to answer the question.

17570

The Master: It is rather a simple matter.

The Witness: Oh, we have a school of instruction, your Honor, where men are taken into this department and they are put through a course of training, where they are taught how to read meters and take care of complaints on the districts.

The Master: How long do you think it would take me to learn to read a meter?

The Witness: How long it would take you?

The Master: Yes.

The Witness: Oh, ten minutes. Anyone can learn how to read a meter.

17571

Q. Well, Mr. Brundage, where is this school of instruction?

The Master: Objection sustained. We have had enough about the school of instruction.

Mr. O'Brien: We have not had enough, your Honor, to see the records of the company.

The Master: Don't let us waste any time on it.

Mr. O'Brien: We have not had the school of instruction.

The Master: When I think my bills are too high, I go down and read my own meter.

17572 Henry M. Brundage, Cross.

Mr. O'Brien: Now, the strange thing about it, your Honor, and I want to say it for your benefit, because you don't know all about the gas making industry, your Honor, and you are going to be enlightened as we go along.

The Master: Of course I don't, but this won't enlighten me.

Mr. O'Brien: You will be met later on with the question of labor, or with the statement as to how difficult it was for them to get men, and how difficult it was for them to get men to learn
17573 the business, and we stand pat on that, you know, and when I get a direct statement on it, I will pass to something else, but I do not want your testimony, I want the witness's testimony.

The Master: How much impression do you think it would make on my mind?

Mr. O'Brien: I don't care what impression I make on your mind, your Honor, I am making the record, it is the record I am making.

The Master: How much impression do you think it would make on any intelligent man's mind if a statement were made that it was most difficult to get men to learn how to read meters.

17574 Mr. O'Brien: I don't know, your Honor.

The Master: Of course, if they do not pay a decent salary, they won't get them.

Mr. O'Brien: Well, I will say that in the Kings County case they tried to explain the increased number of men that they had by showing the difficulty that they had in getting men who could go out and read meters correctly. Now, that is a strange thing, isn't it?

The Master: This is the Consolidated Gas case.

Mr. O'Brien: Well, let me make the record.

I have asked a simple question, and I want the answer, naturally.

The Master: Objection sustained.

Q. I will ask you whether when you say "we have a school of instruction," you refer to the so-called school of instruction at 111th Street?

A. I did.

Q. And it is your idea that they teach men how to read meters up there, too?

A. We have a school of instruction at 111th Street and also one at Avenue A shop, Mr. O'Brien.

Q. Do you know what part of the building at 111th 17576
Street you have it?

A. I do not.

Q. Do you refer to the northwest or the southeast corner of 111th Street and First Avenue?

Mr. Ransom: Same objection.

The Master: Objection sustained. I have likewise, you know, got to rule on the importance of these questions with reference to the big question involved, because this case could run along for years unless I ruled that certain branches of it must take a very few minutes.

Mr. O'Brien: If we knew some one was going to come in later on to cover some of these 17577
matters, if we knew for instance that each man who had been in a commercial office would be called for a brief examination as to his work—

The Master: Well, they won't be.

Mr. O'Brien: If we knew—

The Master: We know they won't be

Mr. O'Brien (continuing): That the detail of the meter reading, the question of consumption, is going to be covered by the offer of evidence or records showing the meter readings for a given period were coming in, and there would

be an opportunity for cross-examination, of course, you could curtail it, but where this day may be the last day that we are on that subject, your Honor can see how absolutely necessary it is for me to go into it. We may be met with the statement later on that it is underlying and uncontroverted in this case that at 1911, '13, '14, '09, '10, '08 and '07, they made an accurate test, they have checked it up and proved it, and that nothing has been shown to the contrary, and of course you have then the proof in
17579 this case in capsule form for whatever suggestions this witness has given. If he does not know, your Honor, in detail, of the tests that have been made, then the record ought to show it.

The Master: But you have in this case the broadest, most liberal form of opportunity to cross-examine that has ever been allowed in any case that I have ever had anything to do with. You have been permitted the opportunity to go into their branch offices if you want to and look at all of these records and analyze them and study them through your representative. That is an
17580 opportunity that is never afforded, to my knowledge, in any other kind of litigation.

Mr. O'Brien: Do you recall reading the statement of Mr. Frank as to what happened when he undertook to go in one of the offices up in 15th Street and Irving Place, when they would not let him go down, but they went to the trouble of dragging all the books up to him rather than let him go into the office?

The Master: Yes, because it was thought that that was a better way to look at them. Now, if Mr. Frank or anybody else is not afforded full

access to records in the branch offices, it need only be called to my attention, and he will get it. Now, let us get along.

Q. Do the meter readers ever do any estimating on their own account?

Mr. Ransom: Same objection.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Has it been discovered by any survey or inspection made that the inspectors fall down on the meter readings to the extent that they estimate on their own account? 17582

Mr. Ransom: Same objection.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Brundage, is there any one book of the general books of account or any single account that would lead us to the question of the determination in figures of the unaccounted for gas?

A. Not in the books of account. Books of account are financial figures, Counselor; unaccounted for gas is statistical information.

Mr. O'Brien: I move to strike out the last sentence, your Honor.

The Master: Motion denied. 17583

Mr. O'Brien: And I request your Honor to direct the witness not to volunteer statements.

The Master: I have cautioned the witness not to volunteer. I think it is more important that he does not volunteer a statement, for his own protection, than it is because of any damage to the record. I have told the witness a dozen times if he will simply answer the question yes or no, so far as possible, it will save a lot of time, and I will repeat that instruction.

Q. Have you a record in court that shows the

17584 Henry M. Brundage, Cross.

figures for the unaccounted for gas during the year 1918?

The Master: A record in the general books of account?

The Witness: The books of account do not show the unaccounted for gas.

The Master: And you have no such book here?

The Witness: I can tell the unaccounted for gas for the year 1918.

The Master: I know you can, but have you any book of account here that shows that?

17585 The Witness: I have not, sir.

The Master: I know you have a record here, you have the report of the Public Service Commission that you can look at. That is not what Mr. O'Brien wants.

Q. Can you take the books of account now in evidence and determine from them the estimated amount of unaccounted for gas of the complainant for the year 1918?

A. I cannot.

Q. Can you make any deductions as to the unaccounted for gas from any figures in those books?

A. No, sir.

17586 Q. From any journal entries?

The Master: Oh, you have covered that, Mr. O'Brien. This witness has said over and over again that the books in evidence, that is these books of account marked in evidence, do not show the unaccounted for gas, for this reason, as I understand it, that they simply show the amount of gas sold to the consumers, and charged for, and you cannot find the unaccounted for gas unless you know the make, and that does not appear in the books of account. Is that right?

The Witness: Yes.

The Master: Is my explanation correct?

The Witness: Yes.

The Master: Is my understanding correct?

The Witness: Yes.

Mr. Ransom: On the books in evidence.

The Master: I have said the books in evidence.

Q. Have you produced any record that shows the computation of the unaccounted for gas?

The Master: What do you mean by record, do you mean a book of account?

Mr. O'Brien: Well, what does your Honor 17588
mean by a "record"?

The Master: Well, he has a report of the Public Service Commission that he will call a record.

Mr. O'Brien: Well, let him call it.

The Master: Do you understand that to be a record?

Mr. O'Brien: I do not understand that to be a record. I understand that to be just a pleading.

The Master: Don't waste any time on it.

Mr. O'Brien: On information and belief, that is what I understand it to be. 17589

Mr. Ransom: Well, it is a record, because the Public Service Commission says you shall ascertain your unaccounted for gas in a definite way, and that is done on the face of the report. I do not know any other place where it is done.

Mr. O'Brien: Well, it is not going to serve any purpose for you or me to determine whether it is a record or not. It is not the record I want, and you know I don't want it.

The Master: That is what I was trying to keep the record clear on, and trying to keep you, Mr.

O'Brien, straight on, and keep the witness straight on. You do not mean that kind of a record, do you?

Mr. O'Brien: The witness knows what I mean. There was no occasion for your Honor asking me what I meant by record.

The Master: I want to keep the record straight, if I can.

Mr. Ransom: The law makes that a record.

The Master: Just to show you that you are not so smart: Have you got a record of the un-
17591 accounted for gas in court?

The Witness: In the books of account?

The Master: No. Have you got a record of it in court?

The Witness: I have a record, yes.

The Master: All right, go ahead, Mr. O'Brien.

Mr. O'Brien: You do not need to look at counsel for approval of your statement.

The Master: You may disregard that statement. It is entirely uncalled for. Go on, Mr. O'Brien. He says he has a record in court.

Q. Who keeps this record that you say you have in court?

17592 A. The record that I have in court is the Public Service Commission report.

The Master: Who keeps it?

The Witness: No one keeps it, your Honor.

The Master: All right.

Q. Is there a record kept in the complainant's office that has not been produced in court that shows the computations for each year or parts of years of the unaccounted for gas?

A. Yes. The secretary's office keeps a record of the gas made and the gas sales by years, I believe.

The Master: That is an answer.

Q. Who is charged with the computation for each year of the unaccounted for gas of the complainant company?

A. My department is charged with the duty of assembling the sales for each month.

The Master: Go ahead.

The Witness: And the record of the gas made for each month is gotten together, so far as the Consolidated is concerned, from the station reports, and the rest of the data is kept in the secretary's office.

The Master: So that the station reports and 17594
your report gets into the secretary's office and he tabulates the result?

The Witness: They have them together in there, the records, and they make up the unaccounted for.

Q. Is that making up of the unaccounted for entirely done in Mr. Carter's office?

A. Under his supervision, yes.

Q. And does he then send back the unaccounted for, or determine the figures of credits or debits between the complainant company and the other companies on the subject of transferred gas?

A. Yes, sir. 17595

Q. The figures are arranged there?

A. Yes, sir.

Q. The debits and credits are arranged there?

A. Yes, sir.

Q. Well, then, has Mr. Carter got an accounting staff of his own, a personal accounting staff on secretarial matters?

A. He hasn't an accounting staff, but he has a force of men.

Q. They make up these figures?

A. Do all this work; yes, sir.

17596 Henry M. Brundage, Cross.

The Master: He has a force of clerks to do this?

The Witness: He does, sir.

Q. The question of unaccounted for, does that come into your domain in any way?

A. It does not, Counsellor.

Q. You would not be able to—you are not able to discuss the question of the relative unaccounted for from year to year of the complainant company?

A. No, sir.

Q. Have you acquainted yourself with that sub-
17597 ject?

A. No, sir.

Q. You did testify in general terms as to the method by which debits and credits are estimated on the question of unaccounted for gas. Will you give us the details of that?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, that was gone over in such a hurried way at the time by the witness that it is not clear on the record.

The Master: It has been gone over so often and in so many different forms, either on the
17598 direct-examination of the witness or on the preliminary cross-examination of the witness; or on the subsequent cross-examination by Mr. Chambers, and the subsequent cross-examination by Mr. Hayward of Mr. Woods, that I am not going to permit any more questions about it. That is, I will not permit that question. I know, and the record shows perfectly clearly how they arrive at this unaccounted for gas on the transfer system. As I have stated, I am going to give you every opportunity to develop a point, but I am not going to waste a minute

on a matter that is already covered, or which, in my judgment is sufficiently covered.

Mr. O'Brien: If you will sit down and verify these figures on the question of transferred gas you will find—

The Master: I will take my chances on it.

Q. Mr. Brundage, how often do you get the figures from Mr. Carter's office covering these debits and credits to go into the books on transferred gas?

A. At the end of every month.

The Master: I think that is already covered.

The Witness: It is. 17600

Q. Do you get any other figures, do you get at the same time the statistics, or is it just a certain figure to be credited or debited to a certain company on account of transferred gas?

A. If gas flows from us to some other company, I get a record upon which to render a bill to that company.

Q. In what form is it? Do you use a regular form for that? Do you use a report that comes from Mr. Carter's office to you monthly? Does it give you the form?

The Master: Is it a printed slip of some kind?

The Witness: No, sir, it is a memorandum from the office to charge a certain company for a certain amount of gas. 17601

The Master: Is it a pencil memorandum?

The Witness: No, sir, ink.

The Master: On a printed form?

The Witness: No.

The Master: On a scratch pad?

The Witness: Yes, sir.

Q. Do you preserve those memoranda?

A. I have no doubt they are available in recent times.

17602 Henry M. Brundage, Cross

Q. Can't you say whether you make a practice of preserving them or not?

A. We preserve all records that are considered important, Counsellor, and I have no doubt they are preserved.

Q. Why can't you state positively if you know that, or if you don't know it?

Mr. Ransom: I object to that.

The Master: I will let him state why he cannot state positively.

A. In all recent years they undoubtedly have been.

17603 I have told you about the gas where we sell other companies. Where other companies bill us the bill is checked in the secretary's office and approved and comes to me to go through our books of account.

Q. Well, you use forms, printed forms, for pretty nearly every transaction of the company, do you not?

A. We try to standardize all these routine matters, yes, sir.

Q. You have gone into detail on it in your testimony, various forms used, and reports made, from month to month?

The Master: We have got that. Why don't

17604 you have a form for this, a printed form to come from the secretary's office as to charges to be made for transferred gas?

The Witness: That has not been taken up. That is all the answer I can give you.

Mr. Ransom: The bills to the other companies—

The Master: I know, but one would imagine that in a company like this they would have a form of some kind in the secretary's office which is to be filled in, charge blank company for so many feet of gas. I was rather surprised to learn that it comes up on a scratch pad.

17605

Mr. Ransom: Well, it is between two men in the same department.

The Master: Even then I was rather surprised to hear that it was not done on a regular form.

Mr. O'Brien: One of the most important things in the whole book.

The Master: Well, you have got the answer. Mr. Brundage doesn't know.

Q. Mr. Brundage, can you take these books of account that have been offered in evidence and tell us for how much transferred gas the complainant company paid out money in the year 1918?

17606

A. Cubic feet?

Q. In cubic feet?

A. I cannot.

The Master: Do the bills come in dollars?

The Witness: The books of account are always in dollars.

The Master: Reference to the voucher will show the amount?

The Witness: It will.

Q. Is there anything in these books of account that have been offered in evidence that gives the number of cubic feet of gas for which this complainant paid out money in the year 1919?

17607

The Master. Objection sustained upon the ground that the witness has already said that there is not.

If at any time, Mr. Brundage, I make a statement that you have already said something, and I am not correct, I wish you would interrupt me and correct the statement.

The Witness: I will do so.

The Master: I make these statements according to my recollection of the testimony. Sometimes I may not be right about it.

Q. Mr. Brundage, take the operating ledger and find the account covering transferred gas?

By Mr. Ransom:

Q. Which ledger is that?

A. B 1918.

(Witness turns to account indicated.)

By Mr. O'Brien:

Q. Whose handwriting is this in, Mr. Brundage?

A. The handwriting in this account, folio 701, from January to August, inclusive, is that of Mr. Culver. The handwriting in the months from Sep-

17609 tember to the end of the year is that of Mr. Lane.

Q. Both with the company at this time?

A. No. Mr. Culver the last I heard from him he was somewhere in Georgia; Mr. Lane is still with us.

Q. There is no indication here—that is the account at page 701 of Ledger B of 1918, Exhibit 190, is it not?

A. It is.

Q. And the account is entitled "Gas transferred"?

A. It is.

Q. And there is nowhere in that an indication of the amount of cubic feet of gas?

17610 A. There is not.

Q. Just simply the amounts?

A. Yes, sir.

Mr. Ransom: And voucher numbers.

Q. What are these numbers here under the column entitled "Voucher or Journal Entry No."?

A. These numbers refer to either the number of the invoice or the number of the journal entries.

Q. The first entry here is January 31, 1918, is it not?

A. It is.

Q. And the item is "New York Mutual Gas Light Company"?

A. Yes.

Q. $162,863.04?

A. Yes.

Q. And in the column under the title "Voucher or Journal Entry No." is the number 1385?

A. Yes.

Q. What does that mean?

A. That indicates the number of the invoice.

Q. There is no reference to a journal entry in this column?

A. There should not be. That is a sundry creditors bill. 17612

Mr. O'Brien: I want him to give me an answer.

The Master: I think he has answered when he says there should not be.

Mr. O'Brien: He does not need to anticipate and come forward with any excuse that there should not be.

The Master: From what he says I infer that so far as he knows there isn't any.

The Witness: There should not be.

The Master: So far as you know there aren't any?

The Witness: I know there is not. 17613

Q. The same answer you would give with regard to the next item, the Standard Gas Light Company, $13,692.95?

A. Yes.

Q. And as to the Astoria Light, Heat & Power Company, the next item, $584,400.91?

A. Yes.

Q. And opposite the following item, "Sundry Debtors, N. A. Account, $20,774.16" is the No. 73?

A. Yes.

Q. Is that a voucher number?

A. No that is a journal number.

Q. So your statement is not correct that there would not be a journal entry in this column?

A. I did not make any such statement. I said there was no journal entry opposite that item you were asking about.

The Master: There is a journal entry there?

The Witness: There is on that last item.

The Master: Opposite "Sundry Debtors, N. A."?

The Witness: Yes.

17615 By the Master:

Q. What does that refer to?

A. That refers to the number of the journal entry.

Q. What does the journal entry refer to, why do you need a journal entry?

A. Because that is an item that came through sundry debtors blotter.

Q. How do you explain this particular item after the journal entry and the part just above it not being referred to the journal?

A. These first three items represent bills rendered to us by the companies whose names are hereon shown.

17616 The last item represents a credit memorandum issued by us through sundry debtors to the journal, to the ledger, here being the original entry (indicating).

Q. Why did the New Amsterdam item—why was that brought into the journal through the channels you have just referred to?

A. Shall I answer?

The Master: Of course, answer it.

Mr. O'Brien: The witness seems to be timid. He has to have your permission, your Honor.

Mr. Ransom: This witness is not timid, whatever else you may say about him.

The Master: Let the witness answer. Why does that go through the journal entry?

The Witness: At the beginning of the year 1918 it was believed that we would be furnishing the New Amsterdam Gas Company with gas during the year, and therefore we rendered them a credit memorandum for the gas at our station cost. In the case of the other companies they were furnishing gas to us and it was billed at their cost, and they therefore rendered a bill.

By the Master:

Q. The distinction between this journal item and 17618
the other three items is that in this case you were charging for gas and in the other case you were being charged for it?

A. No, in that month, during January, it was all gas flowing to us.

Q. Is there a New Amsterdam bill there?

A. Yes, sir, this last item we are referring to.

Q. The first three?

A. No, sir. This one is a bill to the Mutual at station cost plus ten per cent; the next item is the Standard Gas Light Company, billed at their station cost plus ten; the third item is a bill of the Astoria, billed as I heretofore testified at cost to them plus 17619
seven per cent, on investment. The last is a charge for gas furnished to us but computed at our station cost.

Q. I do not understand that.

A. Let me make it perfectly clear.

Mr. O'Brien: I would like to bring it out my own way, your Honor.

The Master: I want it my way so I can understand it.

Q. Mr. Brundage, I do not understand what you tell me, why there should be a credit memorandum

issued to the New Amsterdam at your station cost, for gas delivered to you at your station during the month of January.

A. Shall I try to explain it, sir?

Q. Yes, I would like to have you explain it.

A. We believed at the beginning of the year 1918 that during the year gas would flow from us to the New Amsterdam, and if it had so worked out the charge of course would be to them at our station cost plus ten per cent. When the month of January had been put together—

17621 Q. (Interposing.) Was anything done at the beginning of the year at all?

A. In what way, your Honor?

Q. Of charging or debiting?

A. This was the first month of the year.

Mr. O'Brien: Did that belief find its way into the books? Was it reflected by any item in the books?

The Master: No.

Mr. O'Brien: I want to aid your Honor in extracting this tooth.

The Master: I do not need any assistance. Do not interrupt me.

17622 Q. Was any book entry made at the beginning of the year?

A. Not until the end of this month, sir.

Q. By the beginning of the year I meant the beginning of the month.

A. No, no book entries made.

Q. Was it necessary to give a credit? Against what were you crediting this item?

A. The New Amsterdam at the end of January could have billed us, sir, for the gas that was transferred to us.

Q. At their station cost?

A. At their station cost.

Q. But they did not do it?

A. But they did not do it because—

Q. (Interposing.) And you owed them some money?

A. We did owe them some money.

Q. Then why do you give them a credit memorandum?

A. Because the computation for that month was made not on their station cost but on our station cost, and they did not know our station cost, so instead of having them bill us we gave them a credit memo- 17624
randum.

Q. Was it not perfectly easy for them to know how much gas they transferred to you during that month?

A. The New Amsterdam people?

Q. Yes.

A. I should say not, sir.

Q. Could they not tell what the cost of the material was?

A. They did not know what our station cost was.

Q. Who furnished the material.

A. They made their own gas to be sure, and they sent a record to our secretary's office, as all the 17625
companies did, in respect of their gas made and their gas requirements, as I have heretofore testified, and our people determined who owed the other. It was determined that the gas had flowed during the month of January from them to us.

Q. True, but as I understand it, at the beginning of the month you assumed that the gas would flow from you to them; is that right?

A. Yes, we believed that would happen during the year.

17626 Henry M. Brundage, Cross.

Q. If that had happened you would have given them a debit charge?

A. I would have billed them at our station cost.

Q. At your station cost?

A. Yes, sir.

Q. Instead of that it developed that the gas came from the New Amsterdam to you?

A. Yes.

Q. Then why could not the New Amsterdam bill you that month the same as any other month?

A. They could have done so, but we having started
17627 out on the belief that the gas was going to flow the other way, we rendered them a credit memorandum.

Q. What difference did it make whether you started out on one theory or another theory; did it change your bookkeeping system at all?

A. Well, it rather simplifies matters, your Honor, if you can have all your computations made along one line each month.

Q. Did you make a series of computations every day?

A. No, but at the end of each month we did.

Q. I cannot get clearly in my mind why at the end of January they could not bill you on your station
17628 cost the same as any other month?

A. They could have done so, I would say, and regardless of the fact of what we might have done during the months of the year, when we came to the end of the year it was then eventually determined which way gas flowed.

Mr. O'Brien: Do not start to set the witness right until I get through cross-examining.

The Master: No, you cannot interrupt, Judge Ransom.

Mr. O'Brien: No S. O. S. here. Let me ask you this, Mr. Brundage—

17629

The Master: I want Judge Ransom to take his seat and the witness to take his seat.

Mr. O'Brien: You see, they are right up on deck, your Honor, when you touch the vermiform appendix.

The Master: No more remarks.

Mr. Ransom: I ask that the witness be permitted to finish his answer.

The Master: Just take your seat and he will finish it before he gets through.

Mr. Ransom: I want him to finish it now. I do not want Mr. O'Brien breaking it up.

17630

The Master: He will finish it.

By Mr. O'Brien:

Q. Mr. Brundage, when you say you believed at the beginning of the year that gas would flow from the complainant to the New Amsterdam Company and that afterwards you found out differently, did that belief at the beginning of the year—was it reflected in an entry in the sundry debtors book, or sundry creditors book?

A. Not until January 31st.

Q. Was this entry made here at the beginning or end of the year?

A. As of January 31, 1918.

17631

The Master: The end of the month.

Mr. O'Brien: The end of the month.

Q. Well, repeating his Honor's statement to you here—

The Master: What is the use repeating it? Get a new statement.

Q. Why do you offer as an excuse for your entering in the operating journal, in the gas transferred account, the item of transferred gas from the complainant company to the New Amsterdam Company under a title "Sundry Debtors," the excuse that you

17632 Henry M. Brundage, Cross.

thought at the beginning it was going to flow from the complainant to the New Amsterdam Company?

Mr. Ransom: I object to the question. There is nothing here that calls for any excuses. He has not given any excuse.

The Master: You need not waste time about that. The trouble with the question is he is not asking anything new.

Mr. Ransom: No.

The Master: That is the point.

17633 Q. Do you know when this typewritten entry was made here in the sundry debtors book or blotter, on page 574, covering transferred gas?

A. Why, approximately, yes.

Q. When was it entered?

A. Somewhere about February 10, 1918.

Q. Do you say that because of the knowledge you have of the practice of keeping this book?

A. Yes.

Q. And that entries for the preceding calendar month would find their way in—

A. About that date.

Q. About that time?

A. Yes, sir.

17634 Q. This is a loose leaf book, is it not, this sundry debtors blotter?

A. Yes, sir.

Q. And the entries are all typewritten?

A. Yes.

Q. This entry here covering this gas transferred is in red print?

A. Yes.

Q. And it is in red for what reason?

A. Because it is a credit.

Q. And it is a credit to whom?

A. The New Amsterdam Gas Company.

Q. How did you come to have a credit in a sundry debtors' blotter?

The Master: I have been asking him that for ten minutes. That is nothing new. The only point that is worth asking this witness about is why the New Amsterdam did not send the bill in the ordinary course. That is what I want to know.

Mr. Ransom: What is the difference?

The Master: I do not know what the difference is. I want to know why it is done.

Mr. O'Brien: We get into a row if you are 17636
going to get into an argument about the importance of this. You cannot laugh me out of it. There are three voices behind me saying this was unimportant, your Honor, and I do not intend to let these men nettle me while I am examining this witness.

The Master: Well, that is because you let them.

Mr. O'Brien: Nobody is going to sneer me out of court. It ought not to be necessary to comment on that, but while I am on a subject I do not want two or three men behind me saying this is unimportant. It is very important. 17637

The Master: I do not know whether it is important or not, but I would like to know, if I can, why the New Amsterdam Company did not bill the Consolidated in the regular way in January, 1918, at its station cost, instead of the Consolidated giving them a credit bill based on station cost of the Consolidated. If the witness can explain it I would like to have it; if not, we will pass along to something else.

The Witness: I am just wondering what I can say to make it clearer to your mind than

what I have already told you, that we expected gas to flow from us to the New Amsterdam and had it so happened we would use our station cost, we are obligated to do that, to use our station cost. When the month of January had been gone through and it was found that gas was flowing the other way we nevertheless used our station cost, believing that in subsequent months the reverse condition would happen and wipe out that credit to that extent, and leave all gas flowing at one station's cost.

17639 By the Master:

Q. What did happen, now?

A. What did happen was that in the month of January gas flowed from them to us.

Q. The other way?

A. As shown by that credit memorandum.

Q. What happened in the subsequent months?

A. I cannot say from memory what happened in the subsequent months.

Q. What did happen, as a matter of fact? Look at the books and see if you can tell me what happened for the subsequent months?

A. Now, in the very next month, your Honor,

17640 gas flowed the other way.

Q. From the Consolidated to the New Amsterdam?

A. To the New Amsterdam.

Q. And you charged them at your station cost?

A. We charged them at our station cost, and here is the entry for it (indicating).

Q. How about March?

A. In March it flowed the same way as it did in January.

Q. And how did you charge them?

A. At our station cost. In April it flowed the

17641

way it did in February. That condition continued, your Honor.

Q. Let us get it. How about May, which way did it flow?

A. In May it flowed to the New Amsterdam.

Mr. O'Brien: Why do you say it flowed that way? Where is the N. A. in it? There is no New Amsterdam there.

The Witness: Well, we only had four Manhattan companies to deal with.

Mr. O'Brien: If you are guessing at that—

The Witness: No, I am not guessing at it.

17642

Q. Give me June.

A. In June the gas flowed to the New Amsterdam.

Mr. O'Brien: He is not reading correctly this record.

The Master: Well, it could not flow both ways.

Mr. O'Brien: There are two items in there, one a debit and one a credit.

Q. Let us hear the explanation of that, Mr. Brundage?

A. There is an item here on the other side of 7.01 to be dealt with that I am not familiar with.

Q. Probably some correction.

17643

A. I have no doubt, sir. In the month of July gas flowed to us. In the month of August gas flowed to us. In the month of September gas flowed to us.

Q. That will do. So, as a matter of fact, the gas flowed to you more than it did from you that year?

A. I am not able to say definitely just how the amount would work out at the end of the year.

Q. From what you have read to me there were more months up to this time that gas flowed away from you than to you?

A. As to the number of months, yes, but it may

be that one month there would be a larger amount than the other.

Q. I ask you if you know whether your station cost was higher or lower than the cost of the other companies?

Mr. O'Brien: I object to that, your Honor.

A. I do not know.

By Mr. O'Brien:

Q. Mr. Brundage, what is the entry for October? It is $60,928.09, a debit to the New Amsterdam Company, is it not?

17645 A. It is not.

The Master: What is it?

The Witness: It is $59,593.85.

The Master: A debit?

The Witness: A debit, the gas flowing to us.

Q. And in the month of November what is it?

A. $48,580.32.

The Master: Gas flowing to you?

The Witness: Flowing to us.

Q. And in the month of December what is it?

A. There are several items in December.

Q. Read them off?

A. There is a credit for $11,488.19 and two debits

17646 for $47,494 and $186,836, and a credit of $254,541.52.

By the Master:

Q. Explain those?

A. At the end of the year 1918, your Honor, whatever had been done during the year in respect of a charge or a credit each month was reversed and the amounts were all cancelled. Then a new entry was made based upon the ascertained facts for the year 1918, as to whether gas flowed from us to them or from them to us, and if it flowed from us to them then the bill was rendered to them at our station

cost, but if it flowed from them to us it was adjusted by a bill from them to us at their station cost.

Q. So that all these previous entries were disregarded?

A. They were all cancelled at the end of the year, December 31, 1918.

Q. And did not enter into the settlement at all?

A. I would not say did not enter into the settlement. The debits and credits were entered between the companies so as to balance all that had been done in the previous months. 17648

Q. But as I understand it, this January item which was on your station cost but which was gas that came to you, was reversed and made upon their station cost, then?

A. If it was found that gas for the entire year flowed to us, yes, sir.

By Mr. O'Brien:

Q. Is this practice indulged in at the end of 1918—or was it previously indulged in in the month of December, 1917, 1916, 1915 and so on down?

A. My recollection is that similar adjustments were required in some of those preceding years. I could not say just what ones, Counsellor. 17649

Q. There was in 1917, was there not?

A. I believe so.

Q. Would that explain the fact that the New Amsterdam item came into the operating ledger under Gas Transferred in the shape of that entry entitled "Sundry Debtors"?

A. It would explain why we started off at the beginning of the year by using our station cost for the gas transferred, and if we used our station cost it would go through Sundry Debtors.

Mr. O'Brien: If this don't give the oppor-

17650 Henry M. Brundage, Cross.

tunity for all kinds of juggling. I don't know what juggling is.

The Master: I don't think you can say that.

Mr. O'Brien: Well, you might as well face it, your Honor. What is the use of going through these forms and gyrations and passing of accounts from one column to another during the whole year if you are going at the end of the year to wipe off the blackboard and set up new figures.

The Master: What are these figures?

17651 The Witness: Those are not the journal entries, your Honor, but they are the invoices. These items here are invoices, and these items are credit memoranda from the various companies here on these dates, and the numbers of them will identify them.

The Master: Well now, what does this item $619,842.63 credit to New York Mutual Gas Light Company, represent?

The Witness: That represents an amount of money from the New York Mutual Gas Light Company. And I can identify that amount for you (examining book) gas received from the

17652 New York Mutual Gas Light Company during the year 1918.

The Master: At whose station cost?

The Witness: Made by them and billed at their station cost.

The Master: What does this item $254,541.52 mean, New Amsterdam Gas Company?

Mr. O'Brien: Referring to what month, your Honor?

The Master: December 31, 1918.

Mr. O'Brien: December 31, 1918, on page 701 of the operating ledger B.

The Witness: The same condition, from the New Amsterdam.

The Master: Gas you bought from them?

The Witness: No, to them.

The Master: Gas you sold to them?

The Witness: Let me see that item (examining book). That represents a credit memorandum from the New Amsterdam Gas Company dated December 31, bearing this voucher number for $254,541.52.

Q. What is the cross reference to that item?

A. For invoice number 18,295. 17654

Q. Is that invoice in court?

A. No.

Q. Are there any invoices here in court?

A. There are not.

Q. Are all these adjustments entered up in the sundry debtors' blotters?

A. No.

Q. Is there any entry made to the sundry debtors' blotters for these adjustments?

A. For those items where our station cost is used, they go through sundry debtors' blotters.

Q. Well, do they go through vouchers approved in such cases? 17655

A. Yes. If not through sundry debtors, they go through an approved voucher.

Q. Well, you have the vouchers approved book. Turn to these items.

A. Will you take some specific one, Mr. O'Brien?

Q. December, 1918, any one of those you are talking about?

A. (Examining book.) I submit our list of vouchers approved during the year, voucher 18,295, a credit memorandum dated December 31, New Amsterdam Gas Company for gas transferred amount $254,541.52.

17656 Henry M. Brundage, Cross.

Q. That is approved January 21, 1919?

A. Yes.

Q. And that is supposed to cover one of the adjustments for the year 1918?

A. It was.

Q. Then this readjustment does not show in the books for 1918?

A. It is all entered in the year 1918. You understand when we get to the end of the year we cannot close our accounts on the 1st of January, but it takes several weeks to get all our records in.

17657 Q. Did you make similar adjustments at the end of the year 1916?

A. My recollection is that there were adjustments for several years back at the end of the year.

Q. Do they run back for 1915, '14, '13 and '12?

A. I should say nothing prior to 1915, as I recall it.

Q. Well, are we to assume, respecting this gas transferred account in the operating ledger, that for those items which have as a cross reference a number of a voucher, that the items are not entered in any general books of account?

A. Yes, they are all entered in the books of ac-

17658 count.

Q. Taking that gas transferred account of January, 1918, what other books of account would we find the item there, a debit to the Standard Gas Company, the Mutual Gas Company, the Astoria Gas Company?

A. All of those items are entered first, after they have been approved, in this record, or the record of invoices approved.

Q. What other books would they be in?

A. They are then transferred by posting to the operating ledger, and they are also posted in the sundry creditors ledger.

Q. Now, take this item here of the Astoria Light, Heat & Power Company, $584,000 and odd, and find me the reference to it in the vouchers approved, and the accounts approved, or invoices approved book?

A. On folio 61 of the list of invoices approved, I find—

The Master: February 19th, 1918.

The Witness: Approved February 19, 1918, I find voucher No. 1411, in the name of the Astoria Light, Heat & Power Company, gas transferred, $584,400.91.

Q. Well, now, do you take it that that means gas 17660
transferred during the month of January?

A. Yes, that is the gas furnished by the Astoria to the Consolidated during the month of January.

Q. Does it include any gas transferred, so far as the books show, during the month of December, 1917?

A. It does not.

Q. Now, there is no reference in this book to any other book than the ledger?

A. No.

Q. The cross reference is to the operating ledger?

A. It is.

Q. There is no other cross reference in this voucher approved or invoices approved book, is there? 17661

A. Yes, there is a cross reference to the invoice itself, bearing the serial number 1411.

Q. And how do you find the page in the invoice approved book?

A. By knowing the number of the invoice, because this record is arranged serially, and the invoice number being posted in the ledger, I can at once refer to this record.

Q. Now, in this invoices approved book, as in the operating ledger under this item, there is no statement made as to the number of cubic feet of gas paid for?

17662 Henry M. Brundage, Cross.

A. There is not.

The Master: I am going to let the witness answer it, but he has already answered a dozen different times.

Mr. O'Brien: Oh, no, he has not.

The Master: Yes, he has.

Mr. O'Brien: I am just going to surprise your Honor. I have to do these things now and then to show how human nature is fallible.

The witness has stated—

Q. I call your attention, Mr. Brundage, to this item
17663 in the sundry debtors blotter on page 574, in red print, referring to gas transferred from the New Amsterdam Company?

A. Yes.

Q. To the complainant company?

A. Yes.

The Master: That is that same credit memorandum?

Mr. O'Brien: It is.

The Witness: It is.

Q. Now, I ask you to read the item.

A. January 31, 1918, New Amsterdam Gas Company, credit memorandum for material and labor
17664 employed by the New Amsterdam Gas Company in the manufacture of gas for our account during the month of January, 1918, 51,445,500 cubic feet at 36.71 cents, amount $18,885.60 plus 10 per cent, $1,888.56, total $20,774.16.

Q. So there is a general book of account that does give the cubic feet of gas transferred?

The Master: Is that the surprising thing you have reference to?

Mr. O'Brien: Yes, sir.

The Master: Oh, I saw that a half hour ago. It is just on a credit memorandum.

Mr. O'Brien: No matter about that. The witness has made a statement here that these books did not contain it, your Honor.

The Master: Well, it is absurd.

Mr. Ransom: Well, let him answer the question.

Q. So that there is a reference made in this book giving the amount of cubic feet—

Mr. Ransom: For all companies?

The Master: Don't interrupt, Judge Ransom. We will get through if you don't.

Q. (Continuing.) Of gas transferred? 17666

A. In respect to that item, yes, sir.

The Master: Whenever you get a credit memorandum in this way, you have to show the amount of cubic feet you were crediting, don't you?

The Witness: We do.

The Master: That will likewise show on invoice No. 1411?

The Witness: From the Astoria Company.

The Master: Yes, the amount of cubic feet.

The Witness: Yes, sir.

The Master: The invoice before you always shows it, and the credit memorandum you issue always shows it? 17667

The Witness: Yes, sir.

The Master: The credit memorandum is practically an invoice in favor of the other company?

The Witness: Yes, sir.

Q. Now, Mr. Brundage, will you state whether or not there are any instructions to you or to the accountancy department, directing you and the accountancy department to make no record in the general books of account of the cubic feet of gas trans-

17668 Henry M. Brundage, Cross.

ferred, where you are entering a debit or a credit for gas transferred?

Mr. Ransom: Same objection.

The Master: The objection will be sustained, upon the ground that there is no justification for the statement with reference to credit items, because the credit items themselves show the amount of cubic feet for which a credit is issued. So far as invoices approved are concerned, the invoice must be read in connection with the book entry, the book entry necessarily must exclude a lot of items. It shows here the amount charged and has reference to the invoice, 1411, and by reference to that you will get the number of cubic feet. That is practically part of this book.

17669

Mr. O'Brien: I know, your Honor, but I would like to have the witness answer, and I would like to have it on the record.

The Master: Objection sustained.

Mr. O'Brien: I note an exception. I have got to enter respectively my objection to the Courts going into these matters when I question the witness as to some matter which I want to bring out.

The Master: Well, I say it is entirely unimportant, and other things are very much more important in this case than this.

17670

Mr. O'Brien: Do you know anything, your Honor, more important than having the number of cubic feet of gas transferred that they paid for?

The Master: No, but there are many things a great deal more important than fussing around for an hour as to why the number of cubic feet does not appear in that book, when it appears on the invoice.

Mr. O'Brien: Certainly if you have any exhibits in this case, statements made that they paid so much money for gas transferred, isn't it a pertinent inquiry as to how much they paid for?

The Master: Why, sure.

Mr. O'Brien: To know how much they paid for?

The Master: Yes, but you are wasting time. I say you are wasting time when you are fussing around.

Mr. O'Brien: Your Honor, I do not waste time. 17672

The Master: When this book shows the number of cubic feet.

Mr. O'Brien: Your Honor, I do not waste any time. The witness made a bald statement without any exception, noting no exception for credit items or debit items, whether it was going out or going in, he made a general statement that the books did not indicate the amount of cubic feet of gas.

The Master: Sit down, Mr. Brundage. Next question.

Mr. O'Brien: Now, I say he is in error in that. Now, I will ask your Honor to permit to 17673 be put in the record whether or not there were any general instructions to omit from the general books of account the number of cubic feet that are covered by the dollars that cover the items of gas transferred.

Mr. Ransom: Objection.

The Master: I won't permit it. Objection sustained.

Q. Do you think, Mr. Brundage, that you could find in the journal any items of gas transferred that will show the number of cubic feet?

17674 Henry M. Brundage, Cross.

The Master: What do you mean?

Q. Besides the amount, the number of cubic feet covered by the amounts?

The Master: What is the point. On a credit memorandum do you mean?

Mr. O'Brien: On any kind of a memorandum. I did not limit my statement in the beginning to credit memorandum.

The Master: Objection sustained.

Q. Take the operating journal for this year, Mr. Brundage. I call your attention to page 32 of the
17675 operating journal for 1918, item 73, which is that original item of gas transferred in January, 1918, from the New Amsterdam company to the complainant. Is there any reference there to any other book besides the operating ledger?

A. The wording of the entry refers to the sundry debtors record for the month and the item on which you have your finger, 701, is the folio under which that entry is posted.

Q. And 361 refers to what?

A. Sundry debtors.

Q. That would indicate the page in sundry debtors?

A. Yes, sir.

17676 Q. There is no amount set opposite this gas transferred indicating the cubic feet covered by this particular item?

A. There is not.

Q. Are you sufficiently acquainted with the items covering transferred gas in the journal for 1918, to state whether or not in any instance they set forth the number of cubic feet of gas sales, the amount for the debit or credit?

The Master: Objection sustained.

Mr. O'Brien: Exception. These matters are important.

The Master: My point is that you have it sufficiently on the record that these books of account do not carry the amount in cubic feet.

Mr. O'Brien: I want to state to your Honor right here that this is the most important branch of the case.

The Master: Well, I think you have the point on the record.

Q. Speaking about the adjustment made at the end of the year, and the cancellation of the records during the year covering items of gas transferred, do those figures come to you from the secretary's 17678 office?

A. For these adjustments?

Q. Yes.

A. They do.

Q. Do you know how they are made up?

A. Only in a general way, as I have already testified on the preliminary examination.

Q. You mean when you were testifying as to unaccounted for gas?

A. No, when I was testifying as to the method they used to determine which company is debtor and which company is creditor. I covered that in my preliminary examination at quite some length. 17679

Q. When the memorandum comes to you, does that bear anything besides the amount and the company to which it is to be debited or credited?

A. It would be in the shape of debits against us and bills from the other companies, from the secretary's office; and if something was to be done through our account I would get a memorandum to bill or credit the other company so many dollars.

Mr. O'Brien: Your Honor, I would like to have some of the vouchers in court covering tranferred gas. That branch of my inquiry I will

let go until tomorrow, and pass on to something else. I would ask the Court to direct counsel to bring in the vouchers covering gas transferred items for the year 1918.

The Master: Mr. Ransom, will you please telephone up to the gas company and have the gas transferred vouchers sent right down?

Mr. Ransom: The situation on that is this: I had sent up—to these vouchers there were annexed, when they were furnished to the representatives of the commission, statements covering the year. I sent up, and I have received the 17681 vouchers minus the statements. What has taken place is this: I am informed that Mr. Frank took the statements annexed to the bills off, detached them, and we have been trying to get them back. He said they were downtown, and for some weeks we have been trying to get back the statements that belong with our vouchers.

The Master: What statements are they?

Mr. Ransom: I have copies of them. They show the transactions with the companies.

The Master: What I want are the vouchers. Are they here?

17682 Mr. Ransom: The vouchers are not complete without the annexed statements.

The Master: I don't care, are the vouchers here?

Mr. Ransom: The vouchers are here.

The Master: All right, produce them.

Mr. Ransom: I produce the vouchers, but I call attention to the fact that of course, as I have stated, we have not the statements which are an integral part of them. There is a statement in that form (showing paper) which is annexed to each, showing the transaction.

The Master: The vouchers are what Mr. O'Brien has called for.

Mr. Ransom: I don't know that he wants merely the vouchers.

The Master: That is all he asks for.

Mr. Ransom: The statements are an integral part of the vouchers.

The Master: Always give a man what he asks for and then wait and see what happens. Now, Mr. O'Brien, you can go ahead with your cross-examination.

Mr. Ransom: One voucher that your Honor 176
has previously directed should be produced when Mr. Brundage was on the stand, Mr. Brundage, I may remind him, has, or should have in his bag.

The Witness: You directed me to bring the voucher for January, 1918.

The Master: All right. You have one, and here are some more.

The Witness: Here is the particular voucher you told me to produce one day when I was on the stand.

The Master: That belongs with the others then?

Mr. Ransom: Yes. 176

The Master: Suppose you keep it with them then.

Q. Look them over, Mr. Brundage, for a few minutes.

The Master: Ask your question. There is no use having the witness look at things. He has seen them before.

Q. Well, look the package over.

The Master: No, just ask your question.

Mr. O'Brien: I am trying to save time, your Honor.

The Master: He will have to look at them again when you ask him.

Q. Counsel for the complainant, Mr. Brundage, has produced a number of invoices which I have just handed to you. Have you seen them before?

A. I have.

Q. Do they bear your signature in any place?

A. I believe many of them do.

Q. Do all of them?

A. I cannot say without examining them in detail.

Q. Well, what is the practice, do they come through
17687 your hands, such vouchers, all the time?

A. They come to me sometimes approved by the secretary, but if he is not available at the moment that the bills have been checked and verified they are sent to me and I approve them.

Q. These vouchers are made up in the secretary's office?

A. No, the bills you handed me were the bills from the Astoria Company, and they are all made up in the Accounting Department of the Astoria Light, Heat & Power Company.

Q. Is there anything on here to indicate the man in the Astoria Company who makes them out?

17688 A. No.

Q. Who checks them up?

A. They are made out by a clerk or clerks in the Astoria Company's office; they are checked by the secretary's office.

The Master: Mr. O'Brien wants to know as to whether there is anything on there that will identify the clerks who made them out or checked them in the Astoria Company?

The Witness: No, sir, there is not.

Q. You have testified, have you not, Mr. Brundage, that the whole matter of adjustment on gas transferred is taken care of in the secretary's office?

17689

A. I did.

Q. Does he send out to each one of the affiliated companies the figures which they are to put on bills and send them in again to his office, and from his office to you?

A. I don't know as to that routine.

Q. You are not acquainted with the routine of the other companies?

A. No, as to whether he sends word to them or not.

Q. Have you ever been over the books of the other companies?

17690

A. Never.

Q. Well, you have said that you have a system of audits and that periodically you audit all your accounts?

A. I do, have them audited, but I am referring to the Consolidated Gas Company, Counsellor.

Q. Well, the Consolidated Gas Company pays large amounts of money out for gas transferred?

A. It does.

Q. Who checks up those amounts to see that they are correct?

A. The great bulk of the gas transferred comes to us from the Astoria Heat, Light & Power Company. During the year in question somewhere between nine and ten billion feet of gas was purchased from the Astoria Company. The Astoria Company is right on our floor. The bill is made up by the Astoria Accounting Department each month, and the secretary sends one of his men to the Astoria Accounting Department, who verifies the accuracy of the bill each month and initials it.

17691

Q. Then that whole work of verifying the amounts of gas transferred each month is done by the secretary's office?

Mr. Ransom: Objected to. It has been fully covered twice by Mr. O'Brien's cross-examination.

The Master: I will allow it once more.

A. Verified by the secretary's office, yes, sir.

Q. Then nobody in the Accounting Department under you checks up the bills of transferred gas, checks up the amounts to see that they comport with the facts?

A. No, sir.

Q. Is there any direction to you to take such ac-
17693 counts from the secretary's office and enter them in the books?

A. In respect of these bills?

Q. Yes?

A. Yes, sir.

Q. Is that a written direction?

A. No, sir.

Q. It is orally given to you?

A. I have no written directions. The bills come to me from the secretary's office and are put through our account.

Q. You never, and nobody under you, or under your direction, goes back of the bill that comes to
17694 you with the O K from Mr. Carter's office?

A. No, sir.

Q. Do you conduct this audit that is made periodically into the account? Do you have anything to do with that?

A. I testified we have our accounts audited by an outside firm of certified public accountants.

Q. So that you haven't anything to do with that?

A. Except to produce the records they ask for in order to have them approve our accounts.

Q. Then this branch is entirely outside of your domain?

The Master: What branch?

Q. The question of transferred gas?

A. I have testified that that is all arranged by the secretary's office.

Q. Do you state positively that your work does not carry you into the books of the other companies?

A. I have never had occasion to look into the books of the other companies.

Q. On any subject involving the mutual relations of the companies?

A. No, sir.

Q. Has anybody under you? 17696

A. None of my people, no, sir.

Q. By your people you mean the accountancy department of the company?

A. That is right.

Q. Who employs these accountants, this firm of outside accountants? They are appointed by the secretary?

Mr. Ransom: I object to that as fully covered.

The Master: I will allow it.

A. I have made the arrangements for a number of years. Prior to that the secretary arranged for it.

17697

Q. When you say you made the arrangements do you mean to say you have been given discretion to employ the auditors, that you select them?

A. No, I mean to say that I conferred with the secretary as to the necessity of having an audit made by an outside firm, and he agreed that it should be done and asked me to make the arrangements with them for the audit. That was accomplished, and the audit has been made every year back to 1905 or 1906.

Q. You do not mean to say that you negotiated

the fees and the conditions under which that audit is made?

A. Those years where I made the arrangement, I agreed tentatively with the examiners as to the fees that were to be paid, and submitted them to the secretary, who approved the suggested arrangement, and it was put into effect.

Q. Did anybody tell you to make arrangements with certain auditors?

A. No.

Q. You mean that you alone selected the auditors
17699 that made the audit during the time that you have selected them?

A. During the time I selected them?

Q. Yes, did someone name the auditors for you and say, "Take the matter of the audit up with such and such firm"?

A. Why, I selected the firm to do the work, because the man I selected was a partner of the firm that formerly did the work, and I continued the arrangement with the man who is now doing the work.

Q. Has Mr. Teele ever audited your books, or his firm?

Mr. Ransom: Objected to.

17700 The Master: Objection sustained.

Mr. O'Brien: I mean before the audit for the preparation of this trial.

The Master: You have had the names of those accountants for a number of years. It was Mr. McCullough for a number of years, and Mr. McCullough's firm before that.

The Witness: Church & McCullough before that, your Honor.

Q. You have not any of their reports before you of the audits made?

A. No, sir; I have not.

Q. Have you preserved them in your office?

Mr. Ransom: I object. That has all been covered before. Mr. O'Brien asked the identical question.

The Master: I will allow it. I assume they were.

A. They are a matter of record.

Mr. O'Brien: I am compelled, your Honor, to ask some of these questions because I want the record to run along connectedly, so that when I am on a given subject it means that you and I and others going over the record afterwards 17702 will have a group of matters.

The Master: I do not think I am going over the record afterwards.

Mr. O'Brien: You do not think so?

The Master: No.

Mr. O'Brien: You are going to trust poor, weak human memory?

The Master: I am going to trust my memory. I do not know how poor it is or how weak it is, but I am not going to read this 10,000 or 15,000 pages of testimony, I will tell you now. There are only one or two or three items that are at all important here, and I have those clearly 17703 in mind.

Mr. O'Brien: Only one or two or three?

The Master: A few.

Q. Mr. Brundage, I judge from the slip that was attached here to the invoices handed to me covering the Astoria Light, Heat & Power Company for the year 1918, that you have the voucher for January of 1918.

The Master: He gave it to you here.

Mr. Ransom: I have already given it to him. I call your attention to the fact that the voucher was not in the possession of Mr. Brundage.

Mr. O'Brien: I thought that covered February.

Mr. Ransom: The first one.

The Master: It was dated February, I suppose. I know he gave it to me and I gave it to you, and you put it with the rest of those vouchers.

Mr. O'Brien: I see.

Mr. Ransom: The production of the vouchers in court was called for by Colonel Hayward and furnished at his request.

Q. You have here on the first voucher, which is
17705 dated January 31st, 1918, a memorandum, 1,150,622,000 cubic feet of gas at .5079, and the amount carried out to the right $584,400.91. Has that your signature or in any shape your O K of this bill?

A. That bill has my approval on it; yes, sir.

Q. That is it down at the bottom there?

A. Yes, sir, in the lower right-hand corner.

Q. "H. M. P., approved, assistant secretary, 2/15/18?"

A. Yes, sir.

Q. Did you go into the question of the amount of that gas before you O K'd this bill?

17706 A. I did not.

Q. Would the same thing be said of the item of 9,770,068,500 cubic feet of gas at .5642, rendered February 28th?

The Master: Was that approved by Mr. Brundage?

Q. Was that approved by you?

A. It was.

Q. And the approval meant that it should be paid?

A. Yes.

Q. And it passed from you to the treasurer's office for payment, did it?

A. No, it passed from my office to the accounting department to go through their records.

Q. And then to the treasurer's office for payment?

A. Yes.

The Master: On what did you base your approval?

The Witness: On a check as to the amount of the bill in money and quantity of gas, made by a representative of the secretary's office.

Q. Is his signature on that in some place?

A. It is.

The Master: How about the cost of manufacture? 17708

The Witness: He confirms the accuracy of the cost of manufacture, your Honor.

The Master: In other words, you rely upon the report to you of your subordinates in the secretary's office?

Mr. O'Brien: He did not say it was his subordinates.

The Master: It was one of his subordinates in the secretary's office when he was assistant secretary and acting secretary.

Mr. O'Brien: He says not.

The Witness: He does not report to me. 17709

Mr. O'Brien: He said he was not.

The Master: When you are acting secretary?

Mr. O'Brien: The witness has said he was not. He disagrees with your Honor on that.

The Master: Let us see if he does.

By the Master:

Q. When you are acting secretary you take the place of Mr. Carter, do you not?

A. Well, I never act as secretary. Mr. Carter is always there and is the secretary of the company and he has his own force.

Q. Well, one of his men?

A. Yes, sir, one of his men.

Q. It is one of his men on whom you rely?

A. Yes, sir.

Q. It is one of the company's men, anyhow?

A. If you wish.

By Mr. O'Brien:

Q. Then you do not go behind the returns on this subject at all?

A. No, I do not.

Q. Do you know anything of the method that is

17711 adopted?

A. To check this bill?

Q. To check the quantity and the price of gas transferred?

A. I do.

Q. Do you officially have to go into it at any time in connection with some other work that you do?

A. Yes.

Q. In what way and at what times?

A. I am an officer of the Astoria, Light, Heat & Power Company and as such have jurisdiction over their accounting department, and these bills are made up along a prescribed routine; but rather than depend

17712 upon the accuracy of the Astoria accounting department people we make a further check for our satisfaction.

Q. Did you not say a few minutes ago when I asked you if you ever went into the books of the affiliated companies on the question of transferred gas that you did not do it?

A. I did. I made that very statement.

Q. What is the correct statement?

A. I will amend that statement to this extent, Counsellor: The Astoria Light, Heat & Power Company is right on our floor, one of our own companies, and I am

an officer of it. I have jurisdiction over the accounting system. I will make that exception to the general statement. The other companies I do not go near, but the Astoria is right under our control every minute.

Q. You are doing the work of those other companies in the matter of their accounts right along?

The Master: Objection sustained. It is fully spread on the record.

Q. So that you do know something about the price that they pay for gas, and the costs?

Mr. Ransom: Objected to. 17714

The Master: Objection sustained.

Q. This item, taking the one for January, 1918, setting forth 1,150,622,000 cubic feet of gas at .5079, the total amount $584,400.91—you perhaps have gone into that amount, have you?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Your Honor, can you not see that where the witness has corrected himself I have got to go back over the things again? He said in one case he passed it on the O K of somebody else, then he amended that to say that in regard to the Astoria Company, he being an officer of that company and going through their books, he does know something about it. I want to ask him that very thing. 17715

The Master: What very thing?

Mr. O'Brien: Whether he went into this amount or quantity of gas and the price that was paid, to find out whether it is correct.

The Court: I ruled it is covered. Objection sustained.

Q. Mr. Brundage, this price here of .5079 is presumed to cover the cost of making gas to the Astoria

plus 7 per cent on what is asserted to be their invested capital?

A. Yes. What is their invested capital is shown in the books.

Q. What is that?

A. What is their invested capital is shown in the books.

Mr. O'Brien: I move to strike that out, your Honor.

The Master: I will grant the motion if you think it makes any difference.

17717 Mr. O'Brien: I want to get him out of the habit he is in.

The Master: You cannot do that any more than I can get you out of some habits you are in.

Q. Mr. Brundage, I call your attention to a paper here that sets forth or purports to set forth rents of the Astoria Light, Heat & Power Company for the year 1918 as follows: Astoria Tunnel $379,190.73, 48-inch and 60-inch main East River Gas Company $61,730, Ravenswood Tunnel $51,172.80, Harlem River main $14,468.12, with a total of $506,561.65, and I will ask you—

Mr. Ransom (interrupting): Showing the wit-

17718 ness a report of Adna F. Weber, chief statistician of the Public Service Commission First District, dated April 19, 1919—

Mr. O'Brien (interrupting): Are you breezing, or talking to the Master?

Mr. Ransom: No. I am going to try and complete this record.

Q. (Continuing.) And I will ask you whether that amount $506,561.65 is included in part in the price for gas on the voucher to which I have just called your attention?

A. Not having the Astoria records here, I am un-

able to testify as to the accuracy of the figures here shown, but whatever rent was paid by the Astoria Company for the use of the facilities therein described was included in their charge for gas to the Consolidated Gas Company.

Q. Does the Astoria Company pay rent for the use of the tunnel?

A. It does.

Q. By whom is the tunnel owned?

A. The Astoria Tunnel is owned by the East River Gas Company of Long Island City.

Q. And why do you refer to it as the Astoria Tunnel? 17720

A. Because we have two tunnels under the East River, one we know as the Ravenswood Tunnel that runs from the Ravenswood works to East 63rd or 65th Street, and the other the larger tunnel running from the Astoria works to 132nd Street and East River. We call one the Ravenswood Tunnel and one the Astoria Tunnel.

Q. And they are both owned by the East River Gas Company?

A. They are, sir.

Q. And it is to the East River Gas Company that you make these payments? 17721

A. That the Astoria makes these payments, yes, sir.

Q. And who are the officers of the East River Gas Company?

A. George W. Doane is the president and Malcolm M. Graham is the secretary and treasurer, I believe, sir.

Q. And do you know who the directors are?

A. I do not.

Q. Do you know any of them?

A. No.

Q. Do you know who any of them are?

17722 Henry M. Brundage, Cross.

A. No, I have no reason to know them.

Q. Where is their office, in your building?

A. Yes, sir.

Q. Don't you come into contact with them in any way?

A. Very little.

Q. Do you hold any position in that company?

A. I do not.

Q. Do you ever go over their books?

A. Never.

Q. On what is that rental based, any formula or

17723 system or adjustment?

A. A rental was established, as I recall it, through resolutions of the boards of directors of the interested companies setting forth the amount of rental to be paid.

Q. Do you know when the resolution was passed?

A. Well, approximately it was right after the Astoria Tunnel was placed in operation, October 15th, from memory.

Q. Well, does the complainant company own any of the stock of the East River Gas Company?

A. The Consolidated Gas Company?

Q. Yes.

17724 A. No.

Q. How much stock does the Consolidated Company own in the New Amsterdam Company?

The Master: Why can't you ask him leading questions on that? You have got it in that book, haven't you?

Mr. O'Brien: I haven't got that.

The Witness: We own $8,991,300.00 par value of their preferred and $12,154,200.00 of their common, together with a little scrip, $175 and $392.

The Master: While you have got that over

here, have you got the number of shares and the percentage of the whole?

The Witness: I can give you the number of shares.

Mr. Ransom: Well, it is over ninety-nine per cent, if that may be satisfactory for your purposes.

Mr. O'Brien: You mean the complainant owns?

The Witness: Yes, over ninety-nine per cent.

Q. Of the New Amsterdam?

A. Yes. 17726

Mr. Ransom: 99.1, I think.

Q. And the New Amsterdam owns all of the East River?

A. I believe so.

Q. And the East River Gas Company was controlled by Mr. Rockefeller?

A. I have no knowledge of it.

Q. You know he built it, don't you?

A. I do not.

Q. Don't you know he started that company?

A. No, sir, I did not know it.

Q. Do you know how many shares he has in the East River Gas Company? 17727

A. Not the slightest knowledge. In fact, my understanding is that the New Amsterdam owns the stock, owns all of their stock.

Q. Well, do you know how many shares of stock, Mr. Rockefeller has in the New Amsterdam Company?

A. I know the Consolidated owns 99 per cent of it.

Mr. Ransom: Or a little over.

Q. Well, then, coming down to the Consolidated, how many shares of stock in the Consolidated Gas Company is owned by Mr. William Rockefeller?

A. I do not know.

Q. Haven't you any records here to tell us?

A. No, sir.

Q. Can you not approximate it?

A. No, sir.

Q. You are the accountant who pays the dividends out for these matters, aren't you?

A. No accountants pay dividends. That is handled through the Treasurer's Department.

Q. Well, by the Treasurer's Department. Haven't you ever come in contact with that list?

A. I have not.

17729 Q. And you say that you cannot recall the number of shares of stock which he has?

A. I have never seen the balance sheet of stockholders of the Consolidated Gas Company.

Q. Is that the only place where that would be seen?

A. It is kept in the Treasurer's Department.

Q. Well, was Mr. Rockefeller present at the meeting when the resolution was passed to fix the rentals of this tunnel?

A. I am unable to say.

Q. Well, will any record here in court indicate to you whether he was or not?

A. No, sir.

17730 Mr. Ransom: I object to that. There isn't anything to indicate he has anything to do with it.

The Master: He has answered.

Mr. Ransom: There is nothing to show he is a director of any of these companies.

Q. Will you tell me the basis of the rental, the way in which it is computed?

A. The basis of the charge was the portion of the investment made by the East River Gas Company for the benefit of the Astoria Company at a rate which, I think, was twelve per cent.

Q. Well, isn't there anything here in all these books of account that we have in evidence, and the other papers that are brought into court, that will enable you to show the basis on which these payments of rent are made?

Mr. Ransom: Objection.

The Master: Objection sustained on the ground we have no Astoria books in court.

Mr. Ransom: Or East River?

The Master: Or East River.

Mr. O'Brien: Well, I will take an exception to your Honor's ruling, and reform my question and 17732
ask the witness whether he is not able to determine from any of the books that are in evidence the basis of this rental.

The Master: Objection sustained.

Mr. O'Brien: Well, your Honor, we have got payments made out amounting to millions of dollars for gas transferred.

The Master: By the Consolidated Gas Company?

Mr. O'Brien: By the Consolidated Company.

The Master: For rent?

Mr. O'Brien: Yes, for rent.

The Master: No. 17733

Mr. O'Brien: They are paying for it when they pay the Astoria Gas Company that price for gas.

The Master: All right, but this witness has said—

Mr. O'Brien: It amounted in 1918 to $506,561.65, and we have the chief accountant here—

The Master: I know all about that, and the witness has said and told you before, that he had no book or record here from which he could verify those figures, but he did know that the

payments of rent were included in the Astoria gas charge. That is all there is about it.

Mr. O'Brien: Well, noting an exception to your Honor's ruling—

Q. Is this rental a certain percentage on the investment?

The Master: He said twelve per cent.

Mr. O'Brien: It is.

The Witness: A percentage on the investment made by the East River Gas Company.

The Master: He said he thought it was 12 per

17735 cent.

Q. So that to know the fairness or the reasonableness of that expenditure, we would have to know the amount of the investment?

The Master: Certainly; objection sustained.

Q. Have you ever audited the figures of the investment in the Astoria tunnel by the East River Gas Company?

A. I have not.

Q. In your capacity as accountant or other officer of the Astoria Company?

A. I have not.

Q. Who passes upon that amount and on whose

17736 O K?

The Master: Objection sustained on the ground this witness has already testified the matter came before the boards of directors of the interested companies, they stated an account showing the invested capital and agreed upon the percentage and the rental was fixed in that way. Now, let us get along.

Q. Can you fix the date of that resolution?

The Master: He fixed it. He thought in October, 1915.

Q. Was that the time that the Astoria tunnel was opened?

The Master: Objection sustained.

Mr. O'Brien: Wait a minute, your Honor. He states he thought they passed that resolution and made that arrangement at about the time they began to use the tunnel. Now, I want that fixed definitely in the record, when they did begin to use the tunnel.

The Master: It is in the record, that he thinks it is in October, 1915, and if the witness is in error about it, it is not important enough. Look at the records and get it. Don't let us waste much time on it. 17738

Q. Then, is the amount the same from year to year? Is there any item or element in the computation that varies from year to year?

A. I believe there has been some minor variations in respect of the East River Gas Company's investment in that tunnel. They have spent a few hundred or a few thousand dollars, I believe, since the tunnel was placed in operation, a very small amount.

The Master: And the 12 per cent has to be figured on that increased item?

The Witness: Yes.

The Master: Who takes charge of keeping the tunnel in operation and repair? 17739

The Witness: The East River Gas Company keeps the tunnel in operation.

By the Master:

Q. Well, are repairs in the tunnel added to the invested capital in it?

A. No, sir.

Q. Additions?

A. We pay a rate of return, your Honor, which provides them sufficient revenue to maintain and keep the tunnel going.

Q. Then, what is there that may be added to it. What item might be added to it from time to time?

A. I have recollection, rather hazy, but it seems to me that several years ago there were some additional pipe galleries or stairways or something of that sort put in the shafts.

Q. And added to the capital?

A. And added to the capital.

By Mr. O'Brien:

Q. Well, the maintenance is paid by the Astoria Company, the watchman is paid—

A. The maintenance of the tunnel is continued by the owner of the tunnel and the Astoria Company
17741 pays the rental.

Q. Well, the watchman—

The Master: The man that watches the pipes to see that people do not blow them up.

Q. He is an Astoria man, isn't he?

A. Not that I know of.

Q. Do you go over the pay rolls of the Astoria Company?

A. Occasionally.

Q. Do you go over their expenditures?

A. Yes.

Q. Is there any money spent annually, I mean an appreciable amount, in the upkeep of the Astoria?

17742 A. No, sir, not by Astoria.

Q. Well, the pumping and all is done by whom?

A. The pumping of the Astoria tunnel?

Q. Yes.

A. By the East River people.

The Master: By what?

The Witness: By the East River Company.

The Master: They pay the cost of pumping the water out?

The Witness: I think they do, yes, sir.

Q. Where does the electricity come from that keeps

those pumps going? Doesn't it come from the electrical plant of the Astoria yards?

A. Not to my knowledge.

Q. Well, don't you go over these bills occasionally of the Astoria Company and audit them?

A. Which bills do you refer to?

Q. The bills that cover the repairs and upkeep of the Astoria tunnel, the elevator man's fee, the watchman's fee.

Mr. Ransom: I object to the question. There is nothing to indicate that any bills come to the Astoria Company. 17744

The Master: I won't sustain it on that ground. I am going to sustain the objection very soon because I think there is enough of it.

Mr. O'Brien: Here is the point I am driving at right here—

The Master: I know what you are driving at.

Mr. O'Brien: There is payment made for the cost of making gas.

The Master: I know what you are driving at.

Mr. O'Brien: The witness is chief auditor, we will assume of each company—

The Master: I don't have to tell you more than once, I know what you are driving at, that is why I am letting you ask some questions on it. You see, I cannot give you a picture of my mind. I have tried that. But here is what—I will try to give it to you again— 17745

Mr. O'Brien: You do not need to give me a picture. I am going along.

The Master: I have in mind the operating books of this company; I have in mind the operating results as they show them. Now, there may be a lot of little items that ought not to be in, or ought to be in. I don't know. There isn't

a living person who can absolutely, definitely, fix the actual, reasonable and proper cost of making and distributing gas. All you can do is approximate it, and I don't care how much time you spend on it and how many little items, when it is all through, it is a great big question and it has got to be approximated, because there isn't any way in the world to get it to a penny.

Mr. O'Brien: Well, let me say something right on that point, your Honor, that you will find in the Teele exhibit we have an item in the Teele
17747 exhibit of $198,000 plus representing a difference between revenues and expenditures.

The Master: Yes.

Mr. O'Brien: In 1918, which was so much advertised in the daily papers the day after it was put in evidence here.

The Master: Yes.

Mr. O'Brien: And that will be, before we get through with this case about five million, if your Honor will pay attention to some of those details, and that whole account is made up of small amounts, thousands of dollars, that ought to come out of this transferred gas.

17748 The Master: One thing is sure—

Mr. O'Brien: Thousands of dollars for this and thousands for that. How are you going to get it unless you get right down to the basis of it.

The Master: One thing is sure, that no matter what criticism you make of the books and the Teele exhibit, you won't avoid using coal in making gas, will you?

Mr. O'Brien: You can throw coal into there and waste it the same as anything else.

The Master: You cannot avoid using it, can you?

Mr. O'Brien: No.

The Master: You cannot avoid using oil?

Mr. O'Brien: Your Honor has a false opinion in this case. You have it fixed in your mind, and you reiterated it from time to time, that the cost of the coal and the cost of the gas oil, leaving out all other controvertible, debatable arguments in this case, will show more than eighty cents. So, what is the use.

The Master: I have not said that at all. I do not say that at all, but what I say is this and I repeat it, that when I get through with this case 17750
I am going to take everything into consideration, making every possible allowance I can for every possible variance of disputed items, and see if I can get a figure below which it is utterly impossible for even you to go as to what it costs to make gas.

Mr. O'Brien: I am speaking of an item that represents one-half a million dollars.

The Master: All right.

Mr. O'Brien: One-half million dollars. I have got to get—

The Master: What item?

Mr. O'Brien: This item here $506,000. 17751

The Master: The pumping of this water out?

Mr. O'Brien: No. That is part of it. I want to find out what it is spent on, what the rent is based on, if the whole item ought to go out, or whether part of it should.

The Master: I said I am going to let you ask one or two more questions, then I am going to stop this line. That is all I can say about it.

Mr. O'Brien: It is not pumping out. I am coming to a place where I can stop it, and I am going to ask the witness whether there are any

other variable elements in the amount of the fixed rental that was paid by the Astoria Company to the East River Gas Company?

A. No, there are not.

Q. Then otherwise as to the rent, it runs along at the same rate from the time that resolution was passed, covering it?

A. Yes.

Q. Then this amount of $506,561.65 does not include coal and oil, it is all interest on fixed capital, isn't it?

17753 A. I have testified that it is computed at the rate on the investment in the tunnel for account of Astoria.

Q. Now, this item of $61,730, purporting to be charged for rent of a 48-inch and a 60-inch main, to the East River Gas Company, relates to what particular mains?

A. That relates to two mains connecting the Ravenswood plant of the New Amsterdam Gas Company with the Astoria plant.

Q. These two mains parallel one another, do they?

A. I believe they do.

Q. Do you know when they were put in?

A. Approximately.

17754 Q. When?

A. 1906.

Q. Both in that year?

A. I am not sure as to that, but approximately that date.

Q. Built with the East River Gas Company's money?

A. They were built by the East River Gas Company, yes, sir.

Q. Are there any other mains connecting the two plants?

A. No.

Q. Besides these two mains?

A. No, these two mains connect Ravenswood and Astoria.

Q. Does this rental include any other mains besides the two that run from Ravenswood to Astoria?

A. No, sir.

Q. Those that you have described?

A. No, just those two mains.

Q. And this $61,730 is based similarly on a percentage?

A. Yes, sir, 12 per cent on the investment.

The Master: That would indicate that it cost about half a million dollars to build these two mains? 17756

The Witness: Those mains cost more than that, as I remember it.

Q. Is there any other element included in that $61,730 besides the 12 per cent on what is computed to be the cost of putting the mains in?

A. No, there is nothing else in there.

The Master: That is true as to the other items here, it is on the basis of 12 per cent on the investment?

The Witness: Yes, sir.

Q. The item of $51,172.80 for the Ravenswood tunnel is based upon the same resolution, is it? 17757

A. It is.

Q. Made at or about the same time the resolution was passed *in re* the Astoria tunnel?

A. I should say approximately that date.

Q. The Ravenswood tunnel was built long prior to the Astoria tunnel, was it?

A. A long while before, yes.

Q. About what time, if you know, was it built?

A. Before my time.

Q. Before your time means more than twenty-five years ago?

17758 *Henry M. Brundage, Cross.*

A. I should say at least that long ago.

Q. That is 12 per cent upon the estimated cost of construction?

A. Of that portion of the tunnel used by the Astoria Company.

Q. Is there any other portion used by the New Amsterdam Company?

A. There is, to get gas from Ravenswood to Manhattan.

Q. And they both have their mains running through that tunnel, both these companies?

17759 A. It is the same main. It is determined upon an estimate as to what portion is used by each company.

Q. This, then is a variable rental, isn't it, from year to year?

The Master: Based upon the percentage of use.

A. Well, the charges in the year 1918 were based upon a resolution adopted by the respective boards, based on the respective use.

The Master: If it is based on the use, it must vary.

The Witness: If it varied there would be a new resolution.

17760 Q. State whether or not the amount of the annual rental is based upon the relative amount of use of the tunnel by such company during the year?

A. Yes, it is.

Q. And how is that proportion of use determined by the amount of gas which comes into Manhattan?

A. I believe it was determined by our engineers, and was passed upon and approved by the respective boards of directors.

The Master: You don't know the basis of it?

The Witness: I do not.

Q. That matter is all adjusted in Mr. Carter's office?

A. Well, the engineers, as I understand it, computed as to the relative use of the tunnel.

Q. They give the figure for that, they will send that to Mr. Carter's office and that factor is used in making any computations.

A. Later on I know it was adopted by the board of directors, and a memorandum reached me as our authority for passing the bills.

Q. Do any other companies use that tunnel?

A. The Ravenswood tunnel?

Q. Yes.

A. I believe not. 17762

Q. Well, they are using the gas that comes over, are they not?

A. Well, the New Amsterdam Gas Company, as I understand it, transfers some gas to the Central Union Gas Company, but it is gas coming from the Ravenswood works.

Q. Yes, and the Mutual gets gas that comes from the Ravenswood works, and the Standard gets gas coming from the Ravenswood works?

Mr. Ransom: I object to this line of inquiry. It is not within the scope of the cross-examination of this witness.

Mr. O'Brien: Why, this man has put his O K 17763
on money going out of this Astoria Company, and that is really money going out of the Consolidated Gas Company. Who knows, if he does not, when he has got his figures on the bag that holds the money?

Mr. Ransom: We are getting very far afield from the examination of this witness.

Mr. O'Brien: We are getting in field.

Q. What is your answer, Mr. Brundage?

A. What is your last question?

Q. These companies get gas from the Ravenswood tunnel?

Mr. Ransom: I object to the question.

The Master: I will allow it.

Mr. Ransom: Exception.

A. There is no question. He has just made an assertion. I am waiting for a specific question.

Q. Is that not the fact?

A. That the other companies get gas from Ravenswood?

Q. Yes.

A. I believe they do.

Q. How much do they pay for the use of the tun-
17765 nel?

A. I don't know.

Q. How are you going to know whether the charges made to the Astoria Company are correct unless you know that everybody who uses the tunnel pays for its use?

Mr. Ransom: That is objected to as incompetent.

The Master: I think the trouble with this, Mr. O'Brien, is that you have not got the witness's answer quite some ways back. As I understand his testimony, it was that the directors of these companies figured the average use of the tunnel made
17766 by the Consolidated and fixed the percentage of use at that time. In other words, they resolved that the Consolidated should be charged, we will say, on the basis of one-half the use. If the tunnel cost a million dollars, then they charged the Consolidated on the basis of half a million, at 12 per cent, and that has run over the years, even though the use might be more or less in any one year. Am I right?

The Witness: My recollection is that the amount that the Astoria was to pay has been changed presumably as the capacity of the tunnel

was used more or less by Astoria, but in every case a resolution has been adopted by my board of directors, and that is as far as I need go.

The Master: You do not go behind that?

The Witness: No, sir—fixing the amount to be paid.

Q. Can you say whether any of the other companies do pay anything for rental of the Ravenswood tunnel?

A. I cannot.

The Master: I think you have got that, Mr. O'Brien.

Mr. O'Brien: Of course, the witness has not 17768
stated that they do or that they don't.

The Master: I don't think we ought to spend any more time on that.

Q. The amount of the investment of course you do not know?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Have you ever gone into the question of the amount of the investment?

The Master: Objection sustained.

Q. Was that amount itself set forth in the resolution?

A. It was not, according to my recollection. 17769

By the Master:

Q. It was not set forth in the resolution?

A. The amount of the investment?

Q. Yes.

A. I believe not. My recollection is that it just stated the amount to be paid in monthly payments to the owner of the tunnel.

Q. Then by figuring the amount of the percentage you could easily figure back what the amount fixed was for the investment if you have the factor of the percentage?

17770 Henry M. Brundage, Cross.

A. I am not sure that the resolution stated the amount of the percentage.

Q. I say if you had it.

A. If I had that, and the amount of the rental, I could readily determine.

Q. Your recollection is that the resolution simply said, "Resolved that we pay for the tunnel so much a month"?

A. Yes.

Mr. O'Brien: I will ask counsel to produce that for tomorrow's session, that resolution, so

17771 we will have it definitely before us.

Mr. Ransom: That is not within the control of the complainant. Your men have been examining the accounts of the other companies, and if there is any document you want you have a way of producing it.

The Master: The application will be denied. I will not give a direction to them to produce Astoria records.

Mr. O'Brien: I did not ask for that.

The Master: Yes, you did.

Mr. O'Brien: I asked for the resolution.

The Master: It is an Astoria resolution.

17772 Mr. O'Brien: Oh, I thought you were referring to the East River Gas Company.

The Master: No, it is an Astoria resolution.

Mr. O'Brien: Of course that is owned by the complainant company.

The Master: I know that, but I have to recognize the separate entity.

Mr. O'Brien: Your Honor, if they want to take that position of course they can do it, but it does not spell out frank disclosure.

The Master: That is a different matter; that is up to them.

Mr. O'Brien: It is the same office, the same man, these figures are fixed in the same cupola.

The Master: You don't have to tell me that. Don't I know all that? Next question.

Mr. O'Brien: Here is the man who is O K'ing the payment of these moneys, and it comes out of the treasury of the Consolidated Gas Company, because they are paying for the cost of making the gas over there, the Astoria Company does not pay it. Here we have the chief accountant who has O K'd payments, he says by reason of a resolution. 17774

The Master: I understand all that, and I understand too that counsel for the complainant says he will not produce records of the Astoria, and I say I will not make him. Now, go ahead.

Q. Do you think from what you remember of the resolution that that authorized you to set up a reproduction cost from which to determine each year's rental?

The Master: Objection sustained. The witness has said the resolution, according to his recollection, fixed a sum of money.

Mr. O'Brien: Now, we have got that twisted again, your Honor. 17775

Q. Did it fix a sum or a percentage? What was there in the resolution that was definite?

A. It fixed a sum of money to be paid to the owner of the tunnel in monthly installments.

Q. It did not mention the percentage at all?

A. Not to my recollection.

The Master: So, I am right again.

Mr. O'Brien: Your Honor, you were right that time.

The Master: You will not say "again."

Mr. O'Brien: I have too much respect to put

you in the class of men who speak *ex cathedra* on everything.

Q. There is included in that account over half a million rental on the Harlem River main. Does that mean the main that runs under the Harlem River, connecting the main running to the Bronx with the First Avenue main?

A. That is a main that crosses the Harlem River, as I recall it, at Second Avenue—Second or Third Avenue—connecting the two boroughs.

Q. Is this the main that was shown under the
17777 Harlem River in the diagram presented to us while Mr. Woods was on the stand?

Mr. Ransom: Objected to.

The Master: I will not sustain an objection.

Mr. Ransom: How can he comment on it?

The Master: I do not believe he can.

Mr. Ransom: He has not even seen it.

The Master: That is why I am permitting the question.

Q. Do you know what particular main it is?

A. I know that this main that the Astoria pays a rental for goes under the Harlem River and is probably the Standard Gas Light Company's, but I cannot
17778 identify it in any diagram, and I was not here when Mr. Woods was on the stand.

Q. And the rental is paid to the Standard Gas Light Company?

A. It is.

Q. And is it based upon a rental or is it based upon some resolution passed by the Astoria Company?

A. The same conditions as before, an investment of so many dollars on which a rate of return is computed. I think it is twelve per cent.

By the Master:

Q. But a resolution fixed the rental?

A. A resolution fixed the amount.

Q. Fixes a flat rental?

A. It does.

Q. Your idea as to how it is arrived at is mere surmise on your part?

A. Yes. The only thing I know definitely, your Honor, is that a resolution was adopted by the Board authorizing certain payments,

Q. Fixing a flat rental payable in monthly installments?

A. Yes.

Q. But the basis on which that was fixed you do not know? 17780

A. I do not.

By Mr. O'Brien:

Q. These percentages and these amounts that are paid for the several rentals that I have questioned you about, making up a total of $506,561.65, are included in the operating expenses of the Astoria Company?

The Master: He has so answered. Objection sustained.

Mr. O'Brien: He could answer it again, your Honor.

The Master: No, I am going to sustain it just to stop this repetition.

Q. Do you know, Mr. Brundage, the capacity of the Astoria tunnel mains? 17781

The Master: Objection sustained.

Q. Do you know the capacity of the mains in the Ravenswood tunnel?

The Master: Objection sustained.

Mr. O'Brien: Your Honor is in all likelihood basing your ruling upon the proposition that this may be an engineering matter, but it is an accountancy matter, and I have a right to find out how much this witness knows about it.

The Master: I am sustaining it upon the ground that it is not proper cross-examination.

17782 Henry M. Brundage, Cross.

Mr. O'Brien: But the books are in evidence, and one of the items in the books is unaccounted for gas; the witness has O K'd payments for this amount and those payments embrace these elements of expense. I think it is a proper question to ask him the capacity of these mains.

The Master: On the further ground that the subject has been fully covered—sufficiently covered.

Q. The rental of the Astoria tunnel is not predicated in any way upon the quantity of the use, is it?

17783 The Master: Objection sustained.

Q. Mr. Brundage, the question of transferred gas and the method of computing transferred gas does not come up in your relations with the Astoria Company, does it?

Mr. Ransom: I object. It has been fully covered.

The Master: I will allow it.

A. I do not get the essence of your question, Counsellor.

The Master: You do not have to estimate the amount of gas you get from Astoria the way you do—

17784 The Witness (interposing): No, sir.

The Master (continuing): On the transferred from the New Amsterdam and the Standard?

The Witness: No, sir.

Q. It is just a simple measurement of the gas that goes into the—

The Master: Pipes, through the meters.

Q. (Continuing.) Into the pipes, through the meters?

A. Yes. We get a record every month from the Astoria—

The Master: No.

Mr. O'Brien: You might let him tell it, your Honor.

The Master: No, I will not.

Mr. O'Brien: When he is giving us something like that we might as well have it.

The Master: We have had it a number of times. I will not let you ask any more. I am going to stop it now.

Q. In your computations of the unaccounted for the Astoria does not figure, does it—the Astoria Company?

Mr. Ransom: Objected to as fully covered. 17786

The Master: Objection sustained.

Mr. O'Brien: I do not understand your Honor's ruling.

The Master: We have been over it so often.

Mr. O'Brien: Not with the Astoria Company, he has not stated that. You might say it is a simple deduction to be made from testimony—

The Master: Yes. It is not perfectly clear on this record that all of the gas that comes from the Astoria plant is metered and measured and charged upon that basis? As to the other plants they figure what their make was and what they sold as compared with the make and sale of all 17787 the other companies, and they charge or debit them as the case may be. Isn't that clear on the record?

Mr. O'Brien: It is a deduction you make. But it is not clear on the record. I might ask the witness another question and clear that up.

Q. Mr. Brundage, for the purposes of making the computations of unaccounted for gas and the amount of gas transferred—the credits and debits—

The Master: You have two different things now, unaccounted for and transferred gas.

17788 Henry M. Brundage, Cross.

Mr. O'Brien: They are both involved in each other.

The Master: Not necessarily. Which is it you want to embrace in your question?

Q. For the purposes of computing your unaccounted for gas and determining the debits and credits in your books for gas transferred to the complainant by the affiliated companies other than the Astoria company the send out of the Astoria Company is embraced in the send out of the Consolidated?

A. It is.

17789 Q. And you get their send out from month to month to make up that computation?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. For the purposes of making computations, of the unaccounted for, where do you take the measurements of the gas that comes from Astoria to the Ravenswood works for enrichment?

Mr. Ransom: I think that has been fully covered. Objected to.

The Master: I will let him answer it. Overruled.

17790 Mr. Ransom: Exception. It is not at all within the scope of this witness's cross-examination.

The Master: I will allow it.

A. It is purely an engineering question.

Q. Is that your answer?

A. It is.

Q. When you were first on the stand you gave us a general explanation of how you determine the unaccounted for.

A. In respect of the Manhattan companies. You are asking me now about Astoria.

Q. You just stated that in the computations for the

unaccounted for you included in the send out of the complainant company the send out of the Astoria?

A. We do, and treat Astoria as though it were the Consolidated for the purpose of the computation as to the other Manhattan companies.

Q. When you gave me that answer did you include the gas that went from Astoria to Ravenswood for enrichment, and then to the Ravenswood tunnel?

A. I included all of the gas sent to the Consolidated by Astoria, regardless of whether it came through Ravenswood or the big Astoria tunnel.

Q. Does that come to you in a separate record from 17792
the account that goes to the Astoria, or is it all bulked from month to month?

A. We get a record from the engineers of the amount of gas sent to the Consolidated by the Astoria each month.

Q. Does that amount include the gas that comes via Ravenswood?

A. It includes all the gas coming through, either way.

The Master: Putting it another way, it includes all the gas that leaves Astoria.

The Witness: Yes, sir.

Q. Do they separate the two quantities, that which 17793
comes via Ravenswood and that which comes through the Astoria tunnel, in the monthly statement?

A. My recollection is they do not.

By the Master:

Q. The vouchers in court here do not seem to show that, do they?

A. As to which way it came?

Q. Yes.

A. No, sir.

Q. When you get a bill here for January, for instance, it says so many cubic feet?

A. Yes, sir.

Q. That was the number of cubic feet that was metered through or left the Astoria plant?

A. Yes, sir.

Q. And when it left the Astoria plant it either came through the Astoria tunnel or went down to Ravenswood, but which ever way it went, it came into the Consolidated?

A. Yes, sir, it came into our mains.

By Mr. O'Brien:

Q. Then the same charge is made on the bills rendered to the complainant company by the Astoria
17795 Company for gas which goes either way?

A. Yes.

Q. Is there any difference made for either gas in the computations of the Astoria Company, which they make before they render these bills?

Mr. Ransom: I object to the question as too vague.

A. I do not follow you.

Q. I will put it to you in a different form. In the bills showing the aggregate amount per month charged to the complainant company by the Astoria Company, is there a different rate charged for the gas sent through the Ravenswood than for the gas
17796 which goes through the Astoria tunnel?

A. No, sir; it is one rate, as shown by the bills in your hand.

Q. This total does not show it.

The Master: I think I know what Mr. O'Brien is after. I do not know why he throws so much mystery about it.

By the Master:

Q. The gas that goes through the Astoria tunnel is ready for delivery to consumers, is it not?

A. Yes.

Q. That gas that goes down to Ravenswood is sent

down there for enriching purposes; in other words it is coal gas that has got to be enriched?

A. Yes.

Q. When you get a bill for a million cubic feet or a billion cubic feet per month, does that include the same charge for the coal gas that has gone down to Ravenswood to be enriched as it does for the finished gas that comes across from Astoria?

A. I get what he wants now.

The Master: I assume that is what he wants.

Mr. O'Brien: I am not a patient that needs a little medicine, Mr. Brundage. 17798

Mr. Brundage: You ask questions that I cannot answer.

Mr. O'Brien: What?

The Witness: You ask questions that I cannot grasp.

The Master: Is that what you want? Is that what you had in mind—what I have asked?

Mr. O'Brien: I think it is.

The Master: Go on, Mr. Brundage, you tell me what I want to know.

By Mr. O'Brien:

Q. This bill has a total number of cubic feet at a given amount, and I want to know whether that is an 17799 average for the gas furnished both ways to the complainant company?

A. All enriching that is done at the Ravenswood plant of the Astoria gas is billed to the Astoria Company by the New Amsterdam Gas Company and goes into the Astoria's operating expenses. Now, at the end of the month we, therefore, know in the Astoria accounts the actual amounts of operating expenses during the month, and that amount of money, divided by the number of feet they produce, gives us—

17800 Henry M. Brundage, Cross.

The Master: Now, you are going too fast.

Mr. O'Brien: I know my meter is kind of running slow on that.

The Master: We do not need all that.

The Witness: All right, sir, pardon me.

The Master: Let me put it my way.

By the Master:

Q. When the finished gas gets to the Consolidated Company the cost of its production is made up of all the work done at Astoria, plus the work done at Ravenswood?

17801 A. Exactly so.

Q. So that when you have gotten all of the items of cost in Astoria and added to it the enriching bill of Ravenswood, you pass that completed bill along to the Consolidated Company, plus the seven per cent?

A. Yes, sir.

Q. So that when you measure the gas running down to Ravenswood and you measure the gas coming over from Astoria, that is all you need as far as measurement is concerned?

A. I do. That is all I need, sir.

Q. And all this bill naturally would show, then, is one bulk figure?

17802 A. Yes, sir.

Q. Of all the gas that went out of these two plants?

A. Yes, sir.

Q. And the price charged is all the items over in Astoria, plus the bill you pay the Ravenswood?

A. Absolutely, sir.

By Mr. O'Brien:

Q. Which company is enriched, Mr. Brundage, by the work done at the Ravenswood plant?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. Is there a special account kept in the Astoria accounts for the gas that goes out of the Ravenswood tunnel, which would show separately the total expense for that gas, other than for the gas going through the Astoria tunnel?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception. I would like to ask him there one question, your Honor, whether that enriching expense is just charged up as an operating expense and that otherwise the gas sent out by the Astoria is treated the same. 17804

The Master: He has said all that.

Mr. O'Brien: I assume it may be said to be in his answer.

The Master: Yes, he has answered that.

Q. Is there any readjustment at the end of the year in the bookkeeping covering the price paid by the complainant to the Astoria Company?

A. No, sir.

Q. The figures shown on these invoices rendered monthly stand permanently, do they?

A. They do.

Q. Will you tell me how you determine monthly the cost of making gas? 17805

A. I will.

The Master: Proceed.

The Witness: Astoria has in their accounts the total operating expenses. The engineer's report shows us the number of cubic feet of gas made. A division of one by the other shows the cost per thousand cubic feet made. In addition to that cost per thousand made we compute seven per cent on Astoria's invested capital and we then get the total cost per thousand made and multiply it by the number of cubic feet of gas sent to

Consolidated, as shown by the engineer's report. To that we then add seven per cent on Astoria's investment in its gas business and make one total, and then we prepare a bill which shows the number of cubic feet of gas sent to the Consolidated and the amount of money, and make a further computation so that the bill will show the rate per thousand.

Q. These bills are rendered on the last day of the month?

A. No, we never render them until the Astoria's
17807 accounts are closed for the month, usually about 10th or 11th or 12th of the succeeding month.

The Master: The bills are dated the last of the month?

The Witness: We date them the last of the month, but they are actually made up the 10th or 11th or 12th of the succeeding month.

Q. In order to be able to determine the amount of the bill you have got to know—I mean per month or by the month—the amount of coal used and oil used and the prices which are paid by the Astoria company for that particular coal and oil used?

A. We have to have our accounts all closed but
17808 that one entry, which is the last entry goes through our accounts in Astoria every month, the bill against the Consolidated. Everything else must be closed and available.

Q. What did you say was the last thing you had?

A. The very last entry in the Astoria's accounts each month is the bill against the Consolidated.

The Master: In other words, the witness says that that bill is not made up until every item to which you have referred is figured up and put into the books.

The Witness: Right.

Q. There are a lot of things besides the making of gas that require a longer period for determination than one week, are there not?

The Master: Put it a direct way: Is there any item that is missing more than a week or ten days after the end of the month that goes into the making of gas?

The Witness: No, by the end of the month we have all the data in to close our accounts.

Q. Then you divide up the proportions of overhead and include them?

The Master: I do not understand there is any 17810
overhead in the Astoria; it is all included in the seven per cent.

The Witness: It is. I have just testified, your Honor, our bill is the actual operating expense for the month plus seven per cent on the investment.

By the Master:

Q. The pay of every employee is paid every week or every month, is it not?

A. Yes, sir; on the weekly pay roll.

Q. All those things are charged in every month and paid every month?

A. Yes, sir. 17911

Q. Executive salaries are charged each and every month?

A. Once a month.

Q. All those things are put in every month?

A. Right, sir.

By Mr. O'Brien:

Q Are the executive salaries included in the amount?

A. All salaries that are paid by the Astoria Company are included in their operating expenses.

Q. What are those salaries?

The Master: What do you mean, the amounts?

Mr. O'Brien: No, the officers.

A. I cannot tell you from memory.

The Master: Have they got a president, secretary and treasurer, who get paid?

The Witness: They have a president who gets no salary, they have a secretary who gets no salary, they have a treasurer and an assistant treasurer who gets no salary.

The Master: In other words, there is no overhead in there for executives?

17813 The Witness: Well, Mr. Carter is the comptroller of the company. I think he gets a small salary from the Astoria. I am the assistant comptroller and they pay me a small salary.

Q. You might mention them as you go along; it won't take any more words.

A. What?

Q. Mention the salaries.

A. I do not know what salary Mr. Carter gets. They pay me $87.50 a month for the work I do for the Astoria company. Those are all the officers that get any salary.

Q. Are there any other overheads charged besides
17814 the seven per cent on the alleged invested capital?

A. Seven per cent on the invested capital.

Q. Is there anything else for overheads besides what you have mentioned?

A. No.

Q. Do you not charge insurance in?

A. Why, certainly they carry insurance.

Q. That is an overhead, is it not?

A. Well, it is a direct operating expense, included in the operating expenses.

By the Master:

Q. That is figured in every month?

A. Absolutely, paid every month.

Q. Paid every month?

A. Yes.

Q. That goes into this fund?

A. Yes, sir. Once a month they make a payment.

By Mr. O'Brien:

Q. Mr. Brundage, briefly state to sum it up, so we will have it definitely, what elements go into that cost. This is a monthly computation I am talking about now; that is, the basis of the bill rendered to the Consolidated company. There is coal used and coke used?

A. Yes, sir. 17816

Q. And oil used?

A. All the manufacturing costs.

Q. Wait a minute, now. I do not want the general label on it.

Mr. Ransom: I object to the question.

The Master: I am going to let Mr. O'Brien ask this question.

Q. And the labor?

A. Yes.

Q. And the insurance?

A. Yes.

Q. And taxes?

A. Yes. 17817

Q. And there is the superintendence?

A. Yes.

Q. And there is the proportion of the rentals?

A. Yes.

Q. That I have just spoken of?

A. Yes.

Q. And there is a proportion of the overheads of these other companies, is there not?

A. No, I do not know of any overheads of any other companies. There are these three rentals you have spoken of in there. There is the New Amster-

dam enricher item you have spoken of. There are the salaries of the accounting department and one or two officers.

Q. There are credits. How do you find out about your credits before the 10th of the month, when you are rendering this bill to the Consolidated company?

A. What kind of credits are you referring to, Counselor?

Q. For residuals.

A. Why, the residuals produced during the month are a matter of record as soon as we get the en-
17819 gineer's report on the 4th or 5th of the month.

Q. Some of them are sold and some of them are yet to be sold by a company, are they not?

A. But they are produced a given month, regardless of when they are sold, Counselor.

Q. How are they entered in this case that is made the basis of the monthly bill?

A. They are charged to stock and credited to residuals produced, and as they are drawn from stock they are drawn for one or two purposes, either to be sold or to be used over again.

The Master: But on what price do you give the operating account credit for them?

17820 The Witness: At the price when they are sold.

The Master: But they have not been sold yet?

The Witness: I know, but the market for them, we know what the last price was.

The Master: Then you credit them at the last price?

The Witness: Yes, sir.

Q. Then we are to understand from what you say, that in getting up the monthly bill to be rendered to the complainant company, you take on the question of residuals, the credit, and deduct that from the cost of manufacture, which credit for residuals is set up on the figure of the last residuals sold?

A. Right, last selling price.

Q. And all on that basis, whether the particular residuals are afterwards used by the complainant or an affiliated company, or sold to some private consumer?

A. Yes.

Q. Now, before you render this bill you have got to know how much you are paying to New Amsterdam gas for enriching, have you not?

A. We have.

Q. Do you get that in, too?

A. We do. 17822

Q. How do you know the cost of the coal? The coal companies and oil companies do not render their bills every month on the first of the month, do they?

A. Coal and oil bills reach us very promptly after the first of the month. I refer now to those shipments made late in the month. The coal companies send their bills, and the oil companies, within four or five days after the shipment has been received.

Q. Well, we will take now the month of November, as an illustration, or rather October, of 1919. There is going to be a bill rendered within a few days after election day for the gas sent to the complainant company by Astoria, and there is a certain amount of 17823
oil used in making that gas, and you are getting up your bill here on the 6th of November to be rendered in a few days to the complainant company. Do you take the price for oil, the price that they send in on the bill for that barge that was over there on the 31st of October that we saw being pumped into the gas oil holders?

A. Your premise is very fallacious. In the first place, we would not be making up a bill against the Consolidated on the 6th day of the month. It will be at least the 12th before we begin to think of making a bill.

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Q. So much the better; we will have that much more time to make up this bill, won't we?

A. All the oil that was received during the month of October will go into our stock account before we close, and all the coal received during October will go into October stock account through the bills.

Q. Why don't you come down to the point and tell me the price you charge up for gas oil?

The Master: You don't ask him the question that will bring out the point. I have been waiting here for ten minutes to hear a question that
17825 will bring out the point. At what price do you charge the coal, and at what price do you charge the oil in a given month?

The Witness: At the average cost of the oil to us.

The Master: According to the stock account?

The Witness: Yes, sir.

Q. Then the price represents an average of all the oil received within what time?

A. It takes into account the oil on hand at the beginning of the month plus the oil received during the month.

The Master: And the same as to coal.

17826 The Witness: Yes, sir.

Q. Then you work with one factor covering the coal on hand at the beginning of the month, and the average price as entered in on your books for that coal, and then the price that was paid for the coal received during the month worked into that average?

A. Yes, sir.

Q. And you make an average of the two?

A. Yes, sir.

Q. A weighted average?

A. I don't know what you mean by the term "weighted average." The result of combining the two

factors, that which you had at the beginning of the month plus what you received during the month, you have a certain amount of coal carried out to so much money, and dividing that by the total, you get the price per ton or gallon.

The Master: That is what Mr. O'Brien calls weighted average.

Mr. O'Brien: I don't know whether that is a weighted average, your Honor. Some companies do not put it in as a weighted average.

The Master: Well, then, we will not have any more about it. 17828

Mr. O'Brien: Well, it goes to the vital questions here.

The Master: I will hold you have had enough of it.

Q. Do you take the total amount on hand at the beginning of the month?

The Master: He has told us what he does.

A. The total amount?

The Master: He has told us what he did. You read your record in the morning and you will see just what he said.

Mr. O'Brien: I do not want it that way, because he has not stated—he has been in court when the term "weighted average" has been discussed a great deal. 17829

The Master: He has told you what he does. He said, "I don't know what you call it, but this is what I do." So go ahead.

Q. Is the same process gone through with oil?

A. Yes, sir.

Q. That you have described for coal?

A. Yes, sir.

Q. Well, what do you do subsequent to the time you render bills to the Consolidated? Certain read-

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justments are made, certain credits are taken against it?

A. In the way of a credit, everything—you will have, for example—

Q. From anybody, yes.

A. That would be billed in the month in which it was received. If we got that credit in a later month, the later month would get the benefit of that credit memorandum.

Q. You would put it in that month?

A. I certainly would.

Q. Yes, as a credit?

17831 A. I recall some minor adjustments on coal. I do not recall any on oil, Mr. O'Brien.

Q. Well, if this nineteen hundred odd thousand dollars that figures in the Astoria Company's report as a credit for the year 1918, becomes a reality, that some time will be credited back to the complainant company for the gas that was furnished to it during the period when that credit accumulated?

Mr. O'Brien: I object to the question, no foundation for any such statement.

The Master: Objection sustained on the ground that I don't know what the question has reference to, I have not seen any Astoria report and do not know what it is all about, and I won't take the inquiry.

17832

Adjourned to Friday, November 7, 1919, at 9:15 A. M.

Last Complainant's Exhibit 361.
Last Defendants' Exhibit NN.